

MICROMEM TECHNOLOGIES INC

Form 20-F

February 28, 2005

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

FORM 20-F

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

or

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

or

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

Commission File No. 0-26005

MICROMEM TECHNOLOGIES INC

•
(Exact name of Registrant as specified in its charter)

Ontario, Canada

(Jurisdiction of incorporation or organization)

777 Bay Street, Suite 1910,
Toronto, Ontario M5G 2E4, Canada
Tel: (416) 364-6513
Fax: (416) 360-4034

(Address of principal executive offices)

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

None

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

Common Shares

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

None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of

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the period covered by the annual report

58,063,437 Common Shares

Indicate by check mark whether the Registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days:

Yes No

Indicate by check mark which financial statement item the Registrant has elected to follow:

Item 17 Item 18

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PART I

INTRODUCTION

Abbreviations

Reference throughout this document to Micromem Technologies Inc. ("Micromem") and/or its affiliates may be made through abbreviated forms of their respective names. See "Item 4. Information on the Company - C. Organizational Structure" for a summary of these abbreviated names.

Forward Looking and Cautionary Statements

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

ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISORS

Not Applicable

ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE

Not Applicable

ITEM 3. KEY INFORMATION

A. Selected Financial Data

The following table sets forth selected consolidated financial data of the Company in United States dollars as of and for each of the five fiscal years ended October 31, 2004, 2003, 2002, 2001 and 2000. The selected consolidated financial data has been derived from the audited consolidated financial statements of the Company. All information contained in the following table should be read in conjunction with the audited consolidated financial statements of the Company and the notes thereto and "Item 5 - Operating and Financial Review and Prospects", included elsewhere in this Form.

Selected balance sheet information

	Years ended October 31,				
	2004	2003	2002	2001	2000
Working capital	\$ 34,685	\$ 100,670	\$ 985,551	\$ 3,455,108	\$ 1,076,127
Capital Assets	2,925	3,768	98,654	336,839	381,125
Total Assets	474,234	350,138	1,583,422	14,454,470	2,219,987
Shareholders' equity	37,610	104,438	1,391,903	14,124,918	1,684,775

Selected statement of operations and deficit information

	Years ended October 31,				
	2004	2003	2002	2001	2000
Interest & other income	\$ (4,746)	\$ (20,121)	\$ (165,892)	\$ (196,520)	\$ (140,231)
Research and development	378,410	490,914	1,601,624	2,212,679	1,205,777
General and administrative expenses	570,684	621,050	1,319,528	2,492,386	6,168,810
Write-down of royalty rights	-	-	10,000,000	-	-
Write-down of patents and trademarks	-	299,820	-	-	-
Loss (gain) on disposal of assets	-	58,302	13,292	(6,134)	-
Loss before income taxes	944,348	1,449,965	12,768,552	4,529,411	7,234,356
Provision for income taxes (recovery)	-	-	(35,537)	30,214	25,000
Net loss	944,348	1,449,965	12,733,015	4,559,625	7,259,356
Loss per share-basic & diluted	0.02	0.03	0.27	0.10	0.19
Weighted average number of basic and diluted shares	52,958,975	47,061,810	46,396,799	44,163,669	38,763,920
Reconciliation between Canadian GAAP and U.S. GAAP:					

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 respects with U.S. GAAP.

Currency and Exchange Rates

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

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

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

	2004	2003	2002	2001	2000
High for period	0.8432	0.7738	0.6654	0.6711	0.6984
Low for period	0.7288	0.6350	0.6179	0.6293	0.6527
End of period	0.8319	0.7738	0.6339	0.6294	0.6568
Average for period	0.7717	0.7200	0.6368	0.6493	0.6779

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

	January 2005	December 2004	November 2004	October 2004	September 2004	August 2004
High	1.2470	1.2467	1.2274	1.2755	1.3140	1.3340
Low	1.2055	1.1919	1.1808	1.2240	1.2715	1.3008

On February 24, 2005, the noon buying rate for one Canadian dollar as quoted by the Bank of Canada was US \$0.8054

(US \$1.00 = CDN \$1.2416).

B. Capitalization and Indebtedness

Not Applicable.

C. Reasons for the Offer and Use of Proceeds

Not Applicable.

D. Risk Factors

The Company and the Company's investors face a number of significant risks, which are described below.

Going Concern

There is substantial doubt about the Company's ability to continue as a going concern because of the substantial losses incurred in the development stage. In addition the Company is still in the development stage and it will be necessary to raise additional funds for the continuing development, testing and commercial exploitation of its technologies. The sources of these funds have not yet been identified and there can be no certainty that sources will be available in the future. As such, the realization of the Company's assets and discharge of its liabilities is subject to significant uncertainty.

The Company's ability to continue as a going concern is dependent upon completing the development of its technology for a particular application, achieving profitable operations, obtaining additional financing and successfully bringing its technologies to the market. The outcome of these matters cannot be predicted at this time. 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.

The Company Currently Has No Operating Revenue

The Company has no revenues and there is no certainty that it will generate revenues in the near future. If the Company fails to enter into any license agreements it will have no revenues and even if it enters into such agreements the amount of the revenues it receives will depend on the terms it is able to get from each licensee and the ability of each licensee to compete in its particular market.

The Company's Technology is under Development

The Company's technology is currently under development and is therefore not yet proven to be commercially viable. In order that the Company may be able to procure revenue generating licensing arrangements, significant development work remains to be completed.

The Company will face intense competition when its technologies are developed to a point at which they may be sold and/or licensed. The Company will be required to introduce its technologies into a well developed market and compete with major corporations who manufacture, sell and license existing memory products such as DRAM, SRAM, EPROM, EEPROM and Flash memory. The market for memory technologies is dominated by major corporations who have established market segments for their memory technologies and products, and have

significantly greater financial and other resources which are required to design, develop, manufacture, market, sell and license their products and technologies. Many of these major corporations have worldwide wafer manufacturing and integrated circuit production facilities.

The success of the Company's Technology will be determined by the following factors for which it has not yet been tested or measured: (i) the ability of manufacturers to incorporate the technology into existing manufacturing capabilities without significant retooling and material costs; (ii) price competitiveness; and (iii) availability and costs of raw materials.

After completion of the development of the Company's Technology, the ability of the Company to compete successfully will depend on elements outside of its control, including the rate at which customers incorporate the Company's Technology into their products, the success of such customers in selling those products, the Company's protection of its intellectual property, the number, nature and success of competitors and their product introductions, and general market and economic conditions. In addition, the Company's success will depend on its ability to develop, introduce, and license or sell in a timely manner its technology or products incorporating its technology and to compete effectively on the basis of factors such as speed, density, die size and packaging.

Products Using the Technology Have Not Yet Been Manufactured

The Company's success depends on whether its technology can be manufactured in large quantities at competitive prices. Failure to be able to manufacture large quantities at competitive prices will seriously hurt the Company's ability to generate revenues.

Competitors are seeking to develop Other Magnetic based Memory Technologies

MRAM is a very crowded and competitive space. The Company understands that many other companies have intensive R&D efforts under way in connection with non-volatile random access memory (RAM). Much work is being done in the magnetic RAM space at companies such as NVE, Cypress, Freescale, Phillips, Motorola and others. Other R&D efforts at IBM, Hewlett Packard and Nantero are focused on non-magnetic based non-volatile RAM. While these companies may be considered competitors of Micromem, they focus on high density RAM applications, whereas Micromem's market entry point is aiming at low density applications. The low density MRAM space is much less competitive. The companies and institutions the Company sees as more direct competitors are Honeywell, Naval Research Laboratories, Ramtron and NVE. All of these companies have substantial resources at their disposal.

The Company may be materially affected by aggressive competition as the memory and data storage industry is highly competitive, and customers make their decisions based on a number of competitive factors, including the following:

- • Functionality
- • Technology
- • Performance
- • Reliability
- • System scalability
- • Price
- • Quality
- • Product availability
- • Customer service
- • Brand recognition

The Company must address each of these factors effectively in order to successfully compete. If the Company is unable to adapt its products and services to changes in these competitive factors, it may never gain market share.

Failure To Receive Continued Financing Will Cause the Business to Suffer

Since there is no assurance that revenues will be realized in the near future, the Company will need additional financing to continue the research and development and to successfully market the technology to potential licensees. While the Company has had sufficient funds thus far to meet its requirements, there is no assurance it will be able to continue to do so, and failure to raise sufficient funds in the future will affect its ability to develop and market the technology.

Because Much of the Company's Success and Value Depends On Its Ownership and Use of Intellectual Property, the Company's Failure to Protect That Property Could Adversely Affect Its Future Growth and Success

The Company's success will depend on its ability to protect its intellectual property. The Company relies primarily on patent, copyright, trademark and trade secret laws, as well as nondisclosure agreements and other methods to protect its proprietary technologies and processes. Despite its efforts to protect its proprietary technologies and processes, unauthorized parties may attempt to copy or otherwise obtain and use its products or technology without authorization, develop similar technology independently or design around its patents. Policing unauthorized use of the Company's products is expensive and difficult, and the Company cannot be certain that the steps it has taken will prevent misappropriation or infringement of its intellectual property.

Intellectual Property Claims Against the Company, No Matter How Groundless, Could Cause Its Business To Suffer

The Company's future success and competitive position depend in part on its ability to retain exclusive rights to its technology, including any improvements that may be made on that technology from time to time by the Company or on its behalf. While the technology is patented or subject to pending patent applications in the U.S.A. and the Company knows of no challenge that has been made either against the technology or against the Company's rights to it, and has no reason to believe that any such challenge might be made or that the grounds for any such challenge exist, if any intellectual property litigation were to be commenced against the Company, no matter how groundless, the result would be significant expense, adversely affecting further development, licensing and sales, and diverting the efforts of its technical and management personnel and, in the event of an adverse outcome, substantial damages and possible restrictions on the further development licensing and use of the technology.

There is no assurance that any of the pending applications will be issued as patents or that any issued patent will not be determined to be invalid at a later date.

No Foreseeable Dividends

Micromem has never paid a dividend on its securities. Micromem does not anticipate paying dividends in the foreseeable future.

Issuance of Additional Securities and Dilution

The board of directors of Micromem has the authority to issue additional Common Shares or other securities of the Company without the prior consent or vote of the Company's shareholders. The issuance of additional Common Shares may have the effect of diluting the proportionate equity interest and voting power of holders of Shares.

Dependence on Key Personnel

The senior managers and employees of the Company are Salvatore Fuda, who serves as the Chairman, Joseph Fuda, who serves as the Chief Executive Officer, and Dr. Cynthia Kuper who recently joined the Company as Chief Technology Officer. Dr. Harry Ruda, and a number of researchers forming the team that he oversees, are key technical personnel, engaged pursuant to research collaboration agreements between the Company and the University of Toronto. The Company's success will depend on its ability to retain certain of its senior management and key technical personnel. It will also depend, to a large extent, on its ability to attract and retain additional highly skilled personnel in the future.

The Company may be materially affected by global economic and political conditions

The Company's ability to generate revenue may be adversely affected by the prevailing uncertainty of the global economy. During 2004 and 2003, the Company implemented various cost-saving measures. The Company cannot provide any assurance that its cost-saving measures will be successful or sufficient to allow the Company to commence generating revenues in future periods because revenues will be dependent, among other things, upon

completion of the development of the Company's technologies and procuring of revenue generating contracts.

The Company's financial condition and results of operations could also be materially affected by unstable global political conditions. Terrorist attacks or acts of war could significantly disrupt the Company's operations and the operations of the Company's future customers, suppliers, distributors, or resellers. The

Company cannot predict the potential impact on its financial condition or results of operations should such events occur.

The Company may be materially affected by rapid technological change and evolving industry standards

Short product life cycles are inherent in high-technology industries due to rapid technological change and evolving industry standards. The Company's future financial condition and results of operations depend on its ability to respond effectively to these changes. The Company cannot provide any assurance that it will be able to successfully develop, manufacture, and market innovative new products or adapt its current products to new technologies or new industry standards. In addition, customers may be reluctant to adopt new technologies and standards, or they may prefer competing technologies and standards. Because the technology market changes so rapidly it is difficult to predict the rate adoption of its ferromagnetic memory technology.

The Company may be materially affected by risks associated with new product development

New product research and development is complex and requires the investigation and evaluation of multiple alternatives, as well as planning the design and manufacture of those alternatives selected for further development. Research and development efforts could be adversely affected by any of the following:

- • Hardware and software design flaws
- • Product development delays
- • Changes in data storage technology
- • Changes in operating systems
- • Changes in industry standards

Manufacturing new products involves integrating complex designs and processes, coordinating with suppliers for parts and components, and managing manufacturing capacities to accommodate forecasted demand. Failure to obtain sufficient quantities of parts and components, as well as other manufacturing delays or constraints, could adversely affect the timing of new product introductions. The Company has experienced product development delays in the past that adversely affected its financial position.

The Company may be materially affected by the risks associated with developing and protecting intellectual property

The Company depends on its ability to develop new intellectual property that does not infringe on the rights of others. The Company cannot provide any assurance that it will be able to continue to develop such new intellectual property.

The Company relies on a combination of U.S. patent, copyright, trademark, and trade secret laws to protect its intellectual property rights. The Company enters into confidentiality agreements relating to its intellectual property with its employees and consultants.

Due to financial constraints, the Company has determined not to file patent and trademark registration applications with foreign governments; this may expose its technologies to infringement in foreign jurisdictions.

Despite all of the Company's efforts to protect its intellectual property rights, unauthorized parties may attempt to copy or otherwise obtain or use its intellectual property. Monitoring the unauthorized use of the Company's intellectual property is difficult, particularly in foreign countries. The Company cannot provide any assurance that it will be able to adequately protect its intellectual property.

The Company may be materially affected if it is unable to attract, retain, and motivate key employees

The Company's future success depends in large part on its ability to attract, retain, and motivate its key employees. The Company faces significant competition for individuals who possess the skills required to design, develop, manufacture, and market the Company's technologies. An inability to successfully attract, retain, and motivate these employees in the future could have an adverse effect on the Company's future financial condition and results of operations.

Volatility of Common Share Price and Volume

Shareholders of Micromem may be unable to sell significant numbers of common shares of Micromem on the NASD OTC-BB (where the common shares are currently traded) without a significant reduction in the price of the shares.

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

Foreign Exchange Risks

Because the Company has historically raised funding in U.S. dollars, and its costs are denominated in Canadian dollars it is subject to foreign exchange risks. A decrease in the value of either of the U.S. dollar relative to the Canadian dollar could affect its costs and potential profitability. The Company does not currently hold forward exchange contracts or other hedging instruments to exchange foreign currencies for U.S. dollars to offset currency rate fluctuations.

Trading Activity in the Company's Stock may be Reduced

Broker-dealer practices in connection with transactions in "penny stocks" are regulated by penny stock rules adopted by the Securities and Exchange Commission. Penny stocks, like shares of the Company, generally are equity securities with a price of less than \$5.00 (other than securities registered on some national securities exchanges or quoted on Nasdaq). The penny stock rules require a broker-dealer, prior to a transaction in a penny stock not otherwise exempt from the rules, to deliver a standardized risk disclosure document that provides information about penny stocks and the nature and level of risks in the penny stock market. The broker-dealer also must provide the customer with current bid and offer quotations for the penny stock, the compensation of the broker-dealer and its salesperson in the transaction, and, if the broker-dealer is the sole market maker, the broker-dealer must disclose this fact and the broker-dealer's presumed control over the market, and monthly account statements showing the market value of each penny stock held in the customer's account. In addition, broker-dealers who sell these securities to persons other than established customers and "accredited investors" must make a special written determination that the penny stock is a suitable investment for the purchaser and receive the purchaser's written agreement to the transaction. Consequently, these requirements may have the effect of reducing the level of trading activity, if any, in the secondary market for a security subject to the penny stock rules, and investors in our common stock may find it difficult to sell their shares.

ITEM 4. INFORMATION ON THE COMPANY

A. History and Development of the Company

Micromem is a corporation formed under the laws of the Province of Ontario, Canada, with principal executive offices at 777 Bay Street, Suite 1910, Toronto, Ontario M5G 2E4. Formerly known as AvantiCorp International Inc., Micromem changed its name to Micromem Technologies Inc. on January 14, 1999. Micromem was incorporated under the laws of the Province of Ontario, Canada, on October 21, 1985 as Mine Lake Minerals Inc. It subsequently changed its name to Avanti Capital Corp. on June 23, 1988 and to AvantiCorp International Inc. on April 30, 1992

before becoming Micromem Technologies Inc. on January 14, 1999 in connection with its acquisition of Pageant Technologies Incorporated ("Pageant International").

Purchase of Pageant International

On January 11, 1999, Micromem completed the acquisition of 100% of the capital stock of Pageant International, in exchange for 32,000,000 Common Shares and warrants for the purchase of an additional 1,000,000 Common Shares (the "Warrants"), representing 88.94% of the outstanding Common Shares of Micromem (89.24% assuming exercise of all the Warrants). The acquisition was completed pursuant to an agreement, dated December 7, 1998, amongst Micromem, as the purchaser, and Ataraxia Corp., as the vendor, and Pageant International. The Warrants were exercisable at CDN \$2.00 per share through January 11, 2000 and thereafter at CDN \$2.30 per share through January 12, 2001 on which date the Warrants remaining unexercised expired. The total purchase price for the Pageant International Common Stock was \$30,000,000. The value of the Common Shares used to pay the purchase price was determined through arm's length negotiations using as a point of reference the price per Common Share of \$1.16 on September 23, 1998 less an agreed upon discount.

The primary asset of Pageant International was an undivided 50% interest in patents, issued in the United States and Europe, with a corresponding application in Japan, for nonvolatile random access memory technology which was, at the time, called MAGRAM and which is, today, called VEMRAM (the "VEMRAM Patents"). The VEMRAM technology also includes certain improvements to the VEMRAM Patents, many of which are the subject of pending patent applications. The undivided 50% interest in the VEMRAM Patents was originally conveyed to Ataraxia Corp. by Estancia Limited, a company incorporated under the laws of the Turks & Caicos Islands ("Estancia"), pursuant to a Joint Ownership and Licensing Agreement dated September 17, 1997 (the "Joint Ownership and Licensing Agreement") which Ataraxia Corp. assigned to Pageant International on October 22, 1997 with the written consent of Estancia. In addition to the undivided 50% interest in the VEMRAM Patents, under the Joint Ownership and Licensing Agreement Pageant International was granted an exclusive worldwide license to develop, manufacture and sell the VEMRAM technology. The Joint Ownership and Licensing Agreement required Pageant International to pay Estancia or its nominee a royalty of 40% of the gross profits less expenses agreed by the parties for each technology license sold. Additionally, Pageant International would be required to pay Estancia Limited 40% of any per unit royalty received by Pageant less properly documented reasonable expenses directly related to the obtaining of those royalties and as agreed by the parties in writing.

The Joint Ownership and Licensing Agreement also provided that if Pageant International, as approved assignee of Ataraxia Corp., sold the rights to the VEMRAM technology to a third party not owned or controlled by it, it would have to pay Estancia 50% of the proceeds from such transaction. This provision made it clear that in the event of the sale of all of the VEMRAM technology rights, 50% of the proceeds would go to Estancia, reflecting its 50% undivided interest in the technology, rather than 40% reflecting its royalty rights under the VEMRAM License. Estancia is controlled by John Zammit. Mr. Zammit has no direct control relationship with Micromem, and the management of Micromem is not aware that Mr. Zammit has any indirect control relationship with Micromem or any control relationship, direct or indirect, with Ataraxia Corp.

The acquisition of Pageant International was treated as a reverse takeover for accounting purposes. A reverse takeover is deemed to have occurred when a company uses so much of its voting stock to purchase another company that the former stockholders of the acquired company could be said to have ended up controlling the company doing the acquiring. In the case of the purchase of Pageant International by Micromem, the two former shareholders of Pageant International ended up with a greater number of voting shares than did the pre-acquisition Micromem shareholders and therefore have been deemed to have apparent control. The consolidated financial statements of Micromem are presented as a continuation of the financial position and results of Pageant International, even though Micromem remains the legal parent and Pageant International remains the legal subsidiary. The primary consequence of the application of this treatment to the acquisition is that the patent rights are recorded at \$100, the historical value at which they were carried on the Pageant International balance sheet.

Agreement to Purchase Estancia Interests

On December 10, 2000, Micromem and Pageant International entered into an agreement (the "Purchase Agreement") with Estancia Limited and Richard M. Lienau ("Lienau") to purchase from Estancia and Lienau all interests (the "Estancia Interests") in the VEMRAM Patents and the VEMRAM technology and

all other rights, interests and entitlements held by Estancia and Lienau as set forth in the Joint Ownership and Licensing Agreement.

Under the Purchase Agreement which closed on March 9, 2001, Pageant International agreed to pay a purchase price of \$50.0 million (the "Purchase Price") to Estancia, as follows:

- i. \$10.0 million was paid on closing (after receipt of regulatory approvals), in the form of 2,007,831 common shares of Micromem (or \$8.0 million worth of Micromem's common shares ("Micromem Shares") based on the close price on the closing date, being \$3.98 per share) and \$2.0 million in cash;
- ii. \$20.0 million, would be paid if and when either: (a) certification is received from Honeywell Federal Manufacturing & Technologies that fully integrated, randomly addressable memory matrices of VEMRAM technology have met certain stipulated performance standards, or (b) Micromem or any of its affiliates executes a definitive agreement for the sale or licensing of the VEMRAM technology to an arm's length third party for any commercial purposes other than testing or evaluation of the technology; payable in the form of cash and Micromem Shares to be determined by Pageant International provided that a minimum of 50% of the \$20.0 million shall be paid in Micromem Shares valued at the close of trading on the date of such certification receipt, sale or licensing; and
- iii. \$20.0 million, would be paid if and when Micromem or any of its affiliates executes a definitive agreement for the sale or licensing of any technology (including the VEMRAM Technology) owned by Micromem to an arm's length third party for any commercial purposes other than testing or evaluation of the technology; payable in the form of cash and Micromem Shares to be determined by Pageant International provided that a minimum of 50% of the \$20.0 million shall be paid in Micromem Shares valued at the close of trading on the date of execution of the license.

Notwithstanding the provisions triggering the two \$20.0 million payments (the "Trigger Events"), Pageant International had the right to pay any portion or all of the Purchase Price at any time following the Closing Date through a combination of cash and a number of common shares of Micromem, provided that a minimum of 50% of such payment was through the issuance of common shares of Micromem.

At the closing of the Purchase Agreement, on March 9, 2001, Estancia was required to and it did enter into a three year technology development agreement with Pageant International for the provision of the services of Richard Lienau in respect of the continued development of VEMRAM technology (the "Technology Development Agreement"). The Technology Development Agreement provided for fees to Estancia of \$215,000 per annum and a budget for the continued development of VEMRAM of up to \$500,000 per annum. Effective April 23, 2002, the Technology Development Agreement was amended to extend the term of the agreement for an additional eight months commencing March 9, 2004 through to November 9, 2004, and to provide a reduction of the monthly fees payable to Estancia to \$107,500 during the periods from June 1 to December 2002, and during the extended period.

Pursuant to the Purchase Agreement, because one or both of the Trigger Events did not occur prior to three years following the Closing Date, on March 9, 2004, Pageant International was deemed to have conveyed a 40% undivided interest in the VEMRAM Patents, and to have granted a 32% gross profits royalty (as described below), to Estancia, where the proportionate interest was calculated as the ratio of the portion of the Purchase Price remaining unpaid (being \$40.0 million) at such date over \$50.0 million. Consequently, Pageant International owns a 60% interest in the VEMRAM Patents and would be required to pay Estancia royalties equal to 32% of: (a) the gross profit, less expenses agreed to by the parties, for each license of the VEMRAM Patents sold or otherwise transferred by Pageant International; and (b) the amount of any unit royalty received by Pageant International as a result of the license or sale of the VEMRAM Patents less properly documented reasonable expenses directly related to the obtaining of said royalties.

Changes to Board of Directors and Management

On January 11, 1999, immediately following the acquisition of Pageant International by Micromem, Stephen Fleming, who had been serving as President and Chief Executive Officer of Pageant USA, was elected to Micromem's Board to join Salvatore Fuda and Ross McGroarty, who had served as directors since 1992 and 1988, respectively. The Board then elected Mr. Fuda as Chairman, Mr. Fleming as President and Chief Executive Officer, and Mr. McGroarty, who had been serving as President, as Executive Vice President and Secretary of Micromem. Subsequently, on March 18, 1999, Robert Patterson, who had been serving as Chairman of the Board and Vice President of Corporate Development of Pageant USA, was elected President and Chief Executive Officer of Micromem to replace Mr. Fleming. On November 15, 1999, Antonio Lopes was appointed Chief Financial Officer of Micromem. On June 15, 2000, Mr. McGroarty resigned as Executive Vice-President of Micromem.

At the annual meeting of shareholders of Micromem held on June 29, 2000, the following individuals were elected as directors of Micromem: Andrew Brandt, Stephen Fleming, Salvatore Fuda, Charles Harnick and George Kennedy. The terms of all previously elected directors ended on such date. The term of Mr. Lopes' employment as Micromem's Chief Financial Officer having ended on June 5, 2000, Raj Viswanathan was appointed as Chief Financial Officer. The term of Robert Patterson's employment as Micromem's President and Chief Executive Officer having ended, Salvatore Fuda was reappointed as Chairman and he was appointed as Chief Executive Officer on June 29, 2000. Also on June 29, 2000, Manoj Pundit was appointed as Executive Vice-President and General Counsel of Micromem. On February 21, 2001, Dr. Dale Hensley was appointed as Chief Operating Officer of Micromem and Pageant USA.

At the annual meeting of shareholders of Micromem held on March 14, 2001, Andrew Brandt, Stephen Fleming, Salvatore Fuda, Charles Harnick, George Kennedy, Manoj Pundit and David Sharpless were elected as directors of Micromem.

At a meeting of the Board of Directors held on March 14, 2001, a resolution was passed appointing Dale Hensley as a director of Micromem. At a meeting of the Board of Directors held on February 13, 2002, the Board accepted the resignation of Salvatore Fuda as President and Chief Executive Officer of Micromem due to health reasons. Salvatore Fuda continues to serve as Chairman and Director of Micromem. In his place, the Board appointed Joseph Fuda to serve as President and Chief Executive Officer. Mr. J. Fuda was also appointed as a director. Messrs. Andrew Brandt, Stephen Fleming, Salvatore Fuda, Charles Harnick, Dale Hensley, George Kennedy, Manoj Pundit, David Sharpless and Stephen Van Fleet were elected as directors of Micromem at the annual meeting held April 30, 2002.

Dr. Dale Hensley's employment as Chief Operating Officer was terminated by Micromem and by Pageant USA effective as of September 24, 2002. Raj Viswanathan resigned as Chief Financial Officer of Micromem on October 31, 2002 and as a director of Pageant USA on September 26, 2002. Dr. Hensley resigned as a director of Pageant USA on September 26, 2002 and as a director of Micromem effective October 9, 2002. Antonio Lopes was appointed as Chief Financial Officer of Micromem with effect from November 1, 2002.

At the annual meeting of shareholders of Micromem held on June 6, 2003, Salvatore Fuda, Stephen Fleming, Charles Harnick, George Kennedy, Andrew Brandt, Manoj Pundit, Joseph Fuda, David Sharpless and Steven Van Fleet were elected as directors of Micromem. The terms of all previously elected directors ended on such date.

At the annual meeting of shareholders of Micromem held on June 25, 2004, Salvatore Fuda, Stephen Fleming, Charles Harnick, George Kennedy, Andrew Brandt, Manoj Pundit, Joseph Fuda, David Sharpless and Steven Van Fleet were elected as directors of Micromem. The terms of all previously elected directors ended on such date. Dan Amadori replaced Antonio Lopes as Chief Financial Officer effective as of the annual meeting date. Messrs. Salvatore Fuda, Joseph Fuda and Manoj Pundit continue to hold their respective offices, as described above at the date of this Form 20F.

Dr. Cynthia Kuper has joined the Company as Chief Technology Officer effective January 28, 2005 after serving as Acting Chief Technology Officer of the Company since September 2004.

B. Business Overview

The Company is engaged in the development of memory technologies having the characteristic of non-volatility, which is the ability to retain information after power has been shut off.

The Company's Technology is based on the Company's ability to use magnetic materials in combination with a sensor to record the "state of magnetization.". Each magnetic element stores one bit of data based on its ability to alternate between states of magnetic polarization, which states are determined by a sensor normal to the magnetic field. The Company's Technology represents "1"s and "0"s by the different polarization of magnets; for example, a magnet oriented north/south is a "1" and a magnet oriented south/north is a "0". The magnetic field strength and direction do not decay when power is switched off; therefore, the memory is non-volatile.

In June 2002, the Company's management determined that its research and development operations required restructuring due to financial constraints, in order to continue the development of its magnetic non-volatile memory technology. Accordingly, the Company commenced restructuring its operations in July 2002 to achieve an orderly transition of its R&D program. As part of this restructuring, Pageant USA closed its Lee's Summit, MO facility by August 31, 2002 and Micromem downsized its head office in Toronto by end of the fiscal year, October 31, 2002. Micromem and Pageant USA terminated Dr. Dale Hensley as Chief Operating Officer effective as of September 24, 2002. Pageant USA terminated all of its other employees by October 31, 2002. Dr. Hensley resigned as a director of Micromem on October 9, 2002 and as a director of Pageant USA on September 26, 2002. In September 2002, Pageant USA terminated its agreement with Townsend Capital Inc. pursuant to which Pageant USA occupied the offices, laboratory and clean room it had occupied at Summit Technology Campus, Lee's Summit, Missouri.

Until August 2002, Micromem was pursuing the development of its two unique memory technologies: (i) a memory design with the magnetic bit aligned horizontally to the substrate (known as "HEMARAM"); and (ii) a memory design with the magnetic bit aligned vertically to the substrate ("VEMRAM"); and since (iii) July 2002, Micromem has participated in further magnetic memory technology research and development pursuant to its collaboration with the University of Toronto and Dr. Harry Ruda, (collectively; the "Company's Technology").

The Company has a portfolio of patents and patent applications protecting the technologies that it is developing.

Industry Background

The semiconductor memory industry is principally driven by the requirements of the computing industry. The nature of the memory manufacturing industry is that it is capital intensive, cyclical, rapidly changing and depends significantly on patent protection.

The semiconductor industry is intensely competitive. Both low-density and high-density nonvolatile memory products are manufactured and marketed by major corporations possessing worldwide wafer manufacturing and integrated circuit production facilities and by specialized product companies.

Company's Technology

The various characteristics of the Company's Technology can be better understood by describing the three basic types of memory used by present day computers, Random Access Memory (RAM), Read Only Memory (ROM), and secondary storage devices such as floppy and hard disks. The three types of memory are described below:

Random Access Memory (RAM)

is memory that can be both read and written randomly, which means that its storage locations can be accessed in any order. Thus a computer using RAM can find and go directly to the selected location rather than performing a sequential search. Semiconductor RAM is usually the

primary memory associated with the computer's *central processing unit (CPU)*, the computational unit of the computer responsible for interpreting and executing instructions. However, RAM is *volatile* which means that all stored

information vanishes once the power supply is removed and must be restored from a secondary storage device each time the power is resumed.

Two typical examples of RAM are Dynamic Random Access Memory and Static Random Access Memory. *Dynamic Random Access Memory (DRAM)* uses integrated circuits containing capacitors to achieve significant storage capacity and speed. DRAM can be written and read in the speed range of less than 100 nanoseconds. DRAM has a major drawback in that its capacitors lose their charge over time and therefore information contained in DRAM must be continually refreshed. Basically, this means that on average DRAM must stop operations every 16-30 milliseconds and restore all of the data it contains or the data will disappear. During this refresh time, the processor has no access to the information being refreshed. *Static Random Access Memory (SRAM)* differs from DRAM in that it stores information in a logic circuit referred to as a flip-flop, rather than in a capacitor. SRAM memory does not need to be refreshed while the power is on, but also loses its information once the power is turned off.

Read Only Memory (ROM)

, like RAM, can be read randomly, but cannot be written randomly. Unlike RAM, however, it is non-volatile and therefore does not lose its information when a computer's power is cut off. ROM is typically employed to store vital program information required during the first moments after a computer is powered on. It may be used for such purposes as forcing system test routines, directing the processor to input/output devices or for controlling access to certain computer subsystems such as hard drives. *EPROMs (erasable programmable read-only memory)* and *EEPROMs (electrically erasable read-only memory)* are read only memories that can be erased and rewritten, but must be written "en masse," rather than at the individual word level. "Flash" memory is a form of EEPROM that is widely used today in such devices as cell phones, modems and personal digital assistants. The drawbacks to Flash memory are that write times are slower, the number of read/write cycles are limited and the requirement for significantly higher power than DRAM to store data.

Secondary Storage Devices

include *Floppy Disks*, which are light and portable and are written and read by a motor driven mechanical drive. They normally have a storage capacity in the low megabyte range. *Hard Disks* far exceed floppy disks in storage capacity and have become the standard for mass storage of data to be written and read by the processor. Both Floppy Disks and Hard Disks are non-volatile and can be both written and read. However, since they are serial (as opposed to parallel) devices, they are considerably slower than RAM.

Micromem's technology combines the use of semi-conducting ferromagnetic metals with a sensor. When the magnetization of the magnetic material changes direction, the sensor senses the change in direction and records a "0" or "1". In this fashion, a bit is created that is non-volatile and based on magnetic properties. Micromem is developing this form of magnetic random access memory for low density applications, such as RFID, that can benefit from non-volatile data storage.

Competition

The Company is aware of others conducting research and development in the magnetic non-volatile memory area. These include IBM Research (San Jose, California), Ovonyx, Inc. (Troy, Michigan), Hewlett-Packard (Palo Alto, California), Honeywell (Plymouth, Minnesota) and Motorola (Phoenix, Arizona).

Two main centers of MRAM research are at IBM and Infineon. IBM and Infineon have alternative MRAM technologies based on the giant magneto resistance (GMR) principle. GMR memory elements consist of two ferromagnetic layers separated by a conductive nonmagnetic interlayer. The electrical resistance is high in the absence of external magnetic field; however, an applied external field forces the initially anti-parallel magnetization in the coupled films into parallel alignment and the resistance drops. The high or low resistance determines the data storage state. MTJ cells have similar sandwiched structures but the interlayer is insulating instead of conducting. In contrast to GMR structures in which the sense current usually flows parallel to the layers, the current in MTJ flows perpendicularly to the layers of the stack.

Neither the current stages of development of these companies' non-volatile technologies nor their projected development completion dates are known with a high degree of certainty.

Recent Developments - Research and Development and Collaboration with University of Toronto and Ontario Centres of Excellence Inc. ("OCE Inc.").

On October 24, 2002, Micromem entered into a 2-year research collaboration agreement ("U of T Research Collaboration Agreement") with Materials and Manufacturing Ontario ("MMO"), the University of Toronto, and Dr. Harry Ruda, Chair Professor in Nanotechnology. Through the collaboration, Micromem has continued its involvement in the research and development of magnetic memory technology, carried out by a highly skilled research team headed and assembled by Dr. Ruda. Under the agreement, Micromem and MMO have each provided CDN \$272,000 of funding and the combined CDN \$544,000 is used to cover the operating expenses of the research collaboration over a term of two years. Under the agreement, Micromem maintains its ownership of its portfolio of patents and intellectual property to date.

On November 1, 2002 ("effective date"), Micromem entered into an Infrastructure Agreement with the University of Toronto, to fund the assembly of a facility for research and development and fabrication of Magnetic Memory ("MMF"). Under the terms of the agreement, Micromem has committed to contribute \$249,463 (CDN \$360,000) in cash to fund the direct costs of MMF. The sum is payable to University of Toronto as follows:

- i. \$83,154 (CDN \$120,000) on execution of agreement, which was paid;
- ii. \$83,154 (CDN \$120,000) at end of the two months following the effective date, which was paid; and
- iii. \$83,155 (CDN \$120,000) at end of the four months following the effective date, which was paid.

On December 10, 2002, the Company entered into a Collaborative Research Agreement with Communications and Information Technology Ontario ("CITO"), the University of Toronto and Dr. Harry Ruda, Professor of Physics at the University of Toronto. Under the terms of the agreement, over a period of two years the Company is required to contribute \$63,750 (CDN \$92,000) and \$67,632 (CDN \$97,600) of in-kind contribution and, CITO is required to contribute \$215,430 (CDN \$308,000) for research into "High Density Magnetic Memory Device Development". In consideration of such contribution, CITO shall receive a royalty based on revenues received from the sale of products incorporating intellectual property developed under this collaboration agreement for the remaining life of patents issued in connection with such intellectual property.

On March 1, 2003, the Company entered into an Equipment Transfer Agreement with the University of Toronto. Under the terms of this agreement, the Company conveyed equipment having an estimated value of \$200,000 (CDN \$297,600) to the University for incorporation into the University's magnetic memory facility for the research and development and fabrication of magnetic memory.

On November 12, 2003, the Company entered into a second 2-year research collaboration agreement ("Second U of T Research Agreement") with Materials and Manufacturing Ontario ("MMO") and the University of Toronto. Through the collaboration, the Company has continued its involvement in the research and development of magnetic memory technology, carried out by a highly skilled research team headed and assembled by Dr. Harry Ruda. Under the agreement, which has a term of two years commencing on the date of the agreement, the Company has committed to providing \$56,130 (CDN \$81,000) per year in cash and \$30,770 (CDN \$44,400) per year of in kind contributions and MMO has committed to providing \$58,900 (CDN \$85,000) in cash. The combined cash contributions of the Company and MMO, \$230,060 (CDN \$332,000), will be used to cover the operating expenses of the research collaboration over a term of two years. MMO's funding of \$117,800 (CDN \$170,000) (or \$58,900 (CDN \$85,000) per year) will be paid directly to the University of Toronto and therefore is not reflected in the Company's financial statements. Under the agreement, the Company maintains its ownership of its portfolio of patents and intellectual property that was developed prior to or outside the scope of the agreement.

Each research collaboration agreement contemplates a number of milestones under a comprehensive research plan. The research is carried out from research facilities at the University of Toronto. Micromem will have the first right to an exclusive and perpetual worldwide sub-license for all uses of the technology developed under the

collaboration (except that the University may use the technology for educational and research purposes). MMO and CITO, as the case may be, will be entitled to receive a royalty on Micromem's

manufacturing revenues from the sale of products incorporating the technology developed under the collaboration. A separate royalty will be negotiated in the future on revenues to be generated by Micromem from sub-licenses of the technology developed under the collaboration.

Each of MMO and CITO is one of four Ontario Centres of Excellence established by the provincial government to promote commercial research partnerships between universities and industry. The OCE program is funded by the Ministry of Enterprise, Opportunity and Innovation; and is part of the provincial government's \$2 billion investment in Ontario's knowledge economy making Ontario more competitive through innovation in science and technology.

On April 1, 2004, MMO, CITO and two other Centres of Excellence (CRESTech and PRO) merged to become OCE Inc., a non-for-profit, member based corporation.

In January 2005 the Company entered into an employment agreement with an arm's length individual for her services as Chief Technology Officer of the Company. The agreement has a term of 2 years and may be terminated by the Company at any time with 4 months notice. The remuneration stipulated in the contract is \$260,000 per year and 300,000 options, each option enabling the holder to purchase one common share of Micromem at \$0.80. In addition, she was previously granted and she continues to hold 100,000 options (each of which entitle her to purchase one common share of the Company for \$0.68) in connection with her role as Acting Chief Technology Officer since September 2004. The Chief Technology Officer, among other things, oversees all research and development of the Company and is responsible for the development of a rollout strategy for MRAM technology, for sourcing potential licensees and adopters of MRAM technology and advising management and the Board of Directors of the Company on technology issues and patent strategies.

Recent Developments - Equity Financing Transactions

In August 2003, the Company completed Unit private placements to two Canadian private investors pursuant to prospectus and registration exemptions set forth in applicable securities laws. Under the private placements, the Company received \$162,500 as subscription proceeds for the sale and issue of 2,031,250 Units. Each Unit consists of one Common Share and one Series A Warrant. Each Series A Warrant entitles the holder to purchase one Common Share and one Series B Warrant for \$0.08 until expiry 12 months from the date of issue. Each Series B Warrant entitles the holder to purchase one additional Common Share for \$0.08 until expiry 12 months from the date of issue. In August 2004 the investors exercised 2,031,250 Series A Warrants and the Company thus issued 2,031,250 common shares and 2,031,250 Series B Warrants and realized proceeds of \$162,500.

In December 2003, the Company completed Unit private placements to two Canadian private investors pursuant to prospectus and registration exemptions set forth in applicable securities laws. Under the private placements, the Company received \$33,000 as subscription proceeds for the sale and issue of 300,000 Units. Each Unit consists of one Common Share and one Series A Warrant. Each Series A Warrant entitles the holder to purchase one Common Share and one Series B Warrant for \$0.11 until expiry 12 months from the date of issue. Each Series B Warrant entitles the holder to purchase one additional Common Share for \$0.11 until expiry 12 months from the date of issue. In October 2004, the private investors exercised 200,000 Series A Warrants and the Company thus issued 200,000 common shares and 200,000 Series B Warrants and realized proceeds of \$22,000. In November 2004 and February 2005 the investors exercise the balance of their Series A and B Warrants and the Company thus issued 400,000 common shares and realized proceeds of \$44,000.

In December 2003, the Company also completed a Unit Private placement to one Canadian private investor pursuant to prospectus and registration exemptions set forth in applicable securities laws. Under the private placement, the Company received \$40,000 as subscription proceeds for the sale and issue of 500,000 Units. Each Unit consists of one Common Share and one Series A Warrant. Each Series A Warrant entitles the holder to purchase one Common Share and one Series B Warrant for \$0.08 until expiry 12 months from the date of issue. Each Series B Warrant entitles the holder to purchase one additional Common Share for \$0.08 until expiry 12 months from the date of issue.

In June 2004, the private investor exercised the Series A Warrants and the Company thus issued 500,000 common shares and 500,000 Series B Warrants and realized proceeds of \$40,000. In September 2004, the private investor exercised the Series B Warrants and the Company thus issued 500,000 common shares and realized proceeds of \$40,000.

In December 2004 the Company completed a Unit Private placement to several U.S. investors pursuant to prospectus and registration exemptions set forth in applicable securities laws. Under the private placement, the Company received \$617,000 as subscription proceeds for the sale and issue of 1,028,344 Units. Each Unit consists of one Common Share and one Series A Warrant. Each Series A Warrant entitles the holder to purchase one Common Share and one Series B warrant for \$0.60 until expiry 12 months from the date of issue. Each Series B Warrant entitles the holder to purchase one additional Common Share for \$0.60 until expiry 24 months from the date of issue.

In January 2005 the Company completed a Unit private placement to one Canadian investor pursuant to prospectus and registration exemptions set forth in applicable securities laws. Under the private placement, the Company received \$10,500 as subscription proceeds for the sale and issue of 14,000 Units. Each Unit consists of one Common Share and one Series A Warrant. Each Series A Warrant entitles the investor to purchase one Common Share and one Series B Warrant for \$0.75 until expiry 12 months from the date of issue. Each Series B warrant entitles the holder to purchase one additional common share for \$0.75 until expiry 12 months from the date of issue.

In January 2005, the Company arranged a Unit Private placement to several investors pursuant to prospectus and registration exemptions set forth in applicable securities laws. Under the private placement the Company is scheduled to receive up to approximately \$883,000 by February 28, 2005 as subscription proceeds for the sale of up to 1,346,490 Units. Each Unit consists of one Common Share and one Series A Warrants. Each Series A Warrant entitles the holder to purchase one Common Share and one Series B Warrant for \$0.65 until expiry 12 months from the issue date. Each Series B Warrant entitles the holder to purchase one additional Common Share for \$0.65 until expiry 12 months form the date of issue.

Patents and Trademarks

The Company believes that protection of its intellectual property is important to its ability to generate revenues from its technologies in the future. The Company has both issued patents and pending patent applications and also enters into confidentiality and other agreements with third parties and its employees for protection of its intellectual property and trade secrets. The Company intends to continue to actively pursue the protection of its intellectual property. Management will determine from time to time the jurisdictions where protection will be sought which determination will be based on a number of factors including: state of development of the Company's Technology; importance of a particular market for the Company's Technology; costs of pursuing patent protection in a jurisdiction; and financial position of the Company.

The Company's magnetic memory patent portfolio comprises three separate series of patents and patent applications: (i) those covering technologies developed pursuant to research collaborations with the University of Toronto and OCE Inc.; (ii) those covering VEMRAM technology; and (iii) those covering HEMRAM technology.

Environmental Matters

The Company is subject to various environmental protection regulations imposed by the government in the jurisdiction where it conducts its development work. The Company is not aware of any current or pending environmental protection laws or regulations that would have a material impact on the Company's capital expenditure requirements or competitive position.

C. Organizational Structure

Micromem has a wholly-owned subsidiary Pageant Technologies Incorporated ("Pageant International"), which was incorporated under the laws of the Turks & Caicos Islands and continued to Barbados on May 25, 2001. Pageant International in turn has a wholly-owned subsidiary, Pageant Technologies (USA) Inc. ("Pageant USA"), a corporation incorporated in the State of Utah, USA. Micromem has a second wholly-owned subsidiary, Memtech International Inc. ("Memtech International"), incorporated under the laws of the Bahamas, which in turn has a

wholly-owned subsidiary, Memtech International (USA) Inc. ("Memtech USA"), a corporation incorporated in the State of Delaware, U.S.A. Micromem had a third wholly-owned subsidiary, Micromem Technologies B.V., ("Micromem BV"), incorporated under the laws of the Netherlands on January 16, 2001, which in turn had a subsidiary, Micromem Technologies S.p.A., ("Micromem Italy"), a

corporation incorporated under the laws of Republic of Italy on January 25, 2001. Micromem Italy was dissolved pursuant to the laws of Italy on December 27, 2002. Micromem BV was dissolved pursuant to the laws of the Netherlands on August 11, 2003.

Pageant International and Pageant USA will be sometimes jointly referred to in this Form 20F as "Pageant". Memtech International and Memtech USA will be sometimes jointly referred to in this Form 20F as "Memtech". Micromem BV and Micromem Italy will be sometimes jointly referred to in this Form 20F as "Micromem Europe". Micromem, Pageant International, Pageant USA, Memtech International, Memtech USA, Micromem BV and Micromem Italy will be sometimes collectively referred to in this Form 20F as the "Company." The following chart sets forth the corporate organizational structure at the date of this Form 20F.

D. Property, Plant and Equipment

Micromem maintains its corporate headquarters in Toronto, Ontario, Canada. The space occupied by Micromem consists of 3,987 square feet of commercial office space and is occupied by Micromem pursuant to a lease that expires December 29, 2005.

The research and development team headed by Dr. Harry Ruda conduct their research and development at facilities at the University of Toronto, which comprise both (i) equipment and tools and (ii) a new clean room and laboratory space.

All facilities and equipment are owned by the University of Toronto and are being made available to the research and development team under Micromem's research collaboration agreements with the University of Toronto and an infrastructure agreement between the University of Toronto and Micromem.

ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

This discussion and analysis of financial condition and results of operations for the years ended October 31, 2004, 2003, 2002, 2001 and 2000 should be read in conjunction with the consolidated financial statements and related notes in this report, which are prepared in accordance with Canadian generally accepted accounting principles (Canadian GAAP) and are stated in United States dollars. These principles are also in conformity with United States generally accepted accounting principles (U.S. GAAP) as described in Note 16 to the Company's 2004 consolidated financial statements.

A. Operating Results

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

Selected statement of operations and deficit information

	(all amounts in United States dollars)				
	2004	2003	2002	2001	2000
Interest & other income	\$ (4,746)	\$ (20,121)	\$ (165,892)	\$ (196,520)	\$ (140,231)
Loss for the period	944,348	1,449,965	12,733,015	4,559,625	7,259,356
Loss per share-basic & diluted	0.02	0.03	0.27	0.10	0.19

Selected balance sheet information

	(all amounts in United States dollars)				
	2004	2003	2002	2001	2000
Working capital	\$ 34,685	\$ 100,670	\$ 985,551	\$ 3,455,108	\$ 1,076,127
Capital Assets	2,925	3,768	98,654	336,839	381,125
Total Assets	474,234	350,138	1,583,422	14,454,470	2,219,987
Shareholders' equity	37,610	104,438	1,391,903	14,124,918	1,684,775

Fiscal 2004 Compared to Fiscal 2003

The Company had no operating revenue in either year. The only income reported in 2004 was interest income of \$4,746 (2003: \$20,121).

The Company's business activity in both 2004 and 2003 was the continued development of its memory technology. The Company signed Research Collaboration Agreements with Material and Manufacturing Ontario ("MMO") in 2002 - 2003 and with Communications and Information Technology Ontario ("CITO"), the University of Toronto and Dr. Harry Ruda in 2002. It entered into an Infrastructure Agreement with the University of Toronto in 2002. In 2004 the Company continued these business relationships and met its requirements under the terms of these agreements.

In 2004 the research milestones that were contemplated in the various agreements have been met on the timetable originally contemplated and in August 2004, the Company filed a provisional patent application, in the name of Dr. Harry Ruda, with respect to certain technology developed pursuant to these initiatives. Additionally the Company entered into negotiations with Dr. Cynthia Kuper to serve as the Company's Acting Chief Technology Officer. Dr. Kuper joined the Company as Chief Technology Officer subsequent to October 31, 2004.

Operating Costs and Expenses declined from \$1,470,086 in 2003 to \$949,094 in 2004. The significant differences included:

- A decrease in wages and salaries expense from \$112,437 in 2003 to \$31,563 in 2004, a decrease of 72%. In 2004 the Company recovered more of the salary costs it incurs for its three employees from other companies that share facilities with the Company.
- Included in professional fees as reported are management and consulting fee payments made to various companies whose shareholders serve as officers and directors of the Company. Such payments totaled \$72,000 in 2004 (2003 - \$201,000). During 2004, the Company engaged an Acting Chief Technology Officer who became employed as the Chief Technology Officer subsequent to the year end.
- Research and development costs decreased from \$490,914 in 2003 to \$378,410 in 2004, a decrease of 23%. The costs associated with the various research initiatives were lower in 2004. Included in the expense reported in 2004 is a provision of \$143,000 (2003: \$107,000) relating to a research program which was terminated in 2002. During 2004, the Company continued its research collaboration with the University of Toronto, Dr. Harry Ruda and Materials & Manufacturing Ontario and CITO.

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- d. Travel and entertainment costs increased to \$77,616 in 2004 from \$17,508 in 2003, an increase of 343%. The Company incurred more travel expenses, primarily to US destinations in pursuit of additional financing and to further its go forward research initiatives.
- e. In 2003 the Company wrote down the remaining balance it reported in patent and trademark costs (\$299,820); this expense was non-recurring in 2004.
- f. Amortization expense on capital assets and patents and trademarks totaled \$5,410 in 2004 versus \$73,178 in 2003, a decrease of 93% reflecting the lower balance reported as such assets in 2004.
- g. During 2004, the Company raised \$73,000 in equity funding through the issue of common shares and warrants, \$264,500 through the exercise of previously issued warrants and \$530,000 through the exercise of previously granted directors and officers stock options.

The Company reported a net loss of \$944,348 (2003: \$1,449,965) for 2004 or \$0.02 loss per share (2003: \$0.03 per share).

Fiscal 2003 Compared to Fiscal 2002

The Company had no operating revenue, its only activities being the development of its memory technologies. Its only income during 2003 was \$20,121 (2002: \$165,892) being principally interest income.

Costs and expenses decreased 50% from \$2,934,444 (excluding the \$10 million write down of royalty rights) in 2002 to \$1,470,086 in 2003.

During the year, the Company expended \$490,914 (2002: \$1,601,624) related to its efforts on research and development of its memory technologies, representing 33.4% (2002: 54.6%) of total expenditures (excluding the royalty rights write down). The research and development expenses primarily consists of payments made under research agreements with the University of Toronto, Dr. Ruda and the funding agencies (CITO and MMO), as further detailed below.

The Company paid \$87,432 (CDN \$136,175) against its commitment under the two year research collaboration agreement that it entered into in October 2002.

Additionally, during 2003, the Company secured funding in connection with the magnetic memory research program from Communications and Information Technology Ontario (CITO). Under a Collaborative Research Agreement among Micromem, CITO, the University of Toronto and Dr. Harry Ruda, in the first year, CITO provided funding of \$106,715 (CDN \$154,000) and Micromem has contributed \$31,875 (CDN \$46,000).

On March 1, 2003, Micromem entered into an agreement with the University of Toronto whereby, Micromem contributed equipment and supplies with an estimated value of \$200,000. The equipment was previously used by Pageant Technologies (USA) Inc., at Pageant USA's former Lee's Summit, Missouri lab facility, and had a book value of \$58,302.

The Company has also continued its efforts to reduce administrative expenses in all areas of operation. The Company continues to control costs performed by outside service providers by performing the work in-house. As a result of these efforts, general administration expenses decreased by 47.2% to \$176,361 in 2003 from \$333,964 in 2002 and travel and entertainment decreased by 76.1% from \$73,385 in 2002 to \$17,508 in 2003.

Professional fees increased by 15.3% to \$303,222 in 2003 from \$262,927 in 2002. Wages and salaries decreased 80.0% to \$112,437 in 2003 from \$562,532 in 2002 as a result of reduced employee levels. The primary source of reductions were from salaries to various executives. For the year ended 2003, the Company paid to the Chief Executive Officer \$90,000 (2002 - \$100,000), Executive Vice President \$90,000 (2002 - \$162,066), Chief Financial Officer \$21,000 (2002 - \$1,590), former Chief Operating Officer \$nil (2002 - \$216,577) and the former Chief Financial Officer \$nil (2002 - \$111,583).

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Amortization of patents and trademarks commenced in 2002 amounting to an expense of \$36,258 (2002: \$31,338). During 2003, the Company wrote off \$130,839 relating to discontinued Patents and Trademark applications. The Company also assessed the remaining patent and trademark applications registered in the United States and Canada and has expensed the residual net book value of \$168,981 to reflect the uncertain nature of future events. The Company continues to actively pursue and protect its patents registered in the United States.

The Company had a net loss of \$1,449,965 for 2003 or \$0.03 loss per share compared to a net loss of \$12,733,015 or \$0.27 per share for 2002. The effect on loss per share of the royalty write down in 2002 was \$0.22 per share.

Unaudited quarterly financial information

Quarter ended,	(all amounts in United States dollars)							
	October 31,	July 31,	April 31,	January 31,	October 31,	July 31,	April 30,	January 31,
	2003				2004			
Total Revenue	\$ 3,036	\$ 642	\$ 1,142	\$ 15,301	\$ 117	\$ 450	\$ 3,658	\$ 521
Net Loss	642,503	165,261	427,609	214,592	447,515	233,663	70,876	192,294
Loss per share:								
Basic and diluted	0.01	0.01	0.01	0.01	0.01	0.00	0.00	0.00

B. Liquidity and Capital Resources

Liquidity

The Company currently has no cash flow from operations and will have none until it is in a position to either license or directly produce and sell products utilizing its memory technologies.

Micromem currently has no lines of credit in place and must obtain equity financing from investors and from persons who hold outstanding options and warrants in order to meet its cash flow needs until it can generate revenues.

Micromem has granted to its directors, officers and other employees a number of options to purchase shares at prices that are at or above market price on the date of grant. None of the optionees has any obligation to exercise his options and there can be no assurance that Micromem will realize any funds.

Capital Resources

Micromem had no material commitments for capital expenditures as of October 31, 2004 or 2003. In March 2001, Micromem and its wholly owned subsidiary, Pageant International, completed the Asset Purchase Agreement described above. The total consideration payable in respect of the purchased assets under the Asset Purchase Agreement was \$50 million in the form of cash and shares. Of this amount, \$10 million was paid at closing through a cash payment of \$2.0 million and the issuance by Micromem of 2,007,831 common shares valued at \$3.98 per share. The balance of \$40 million was to have been payable in two equal amounts of \$20 million each upon achievement of certain stipulated milestones provided that a minimum of 50% of each \$20 million payment would be in the form of shares of Micromem. None of the stipulated milestones were met and therefore no amounts were been paid toward the balance of the \$40 million purchase price.

As no further payments toward the purchase price were made to Estancia under the Asset Purchase Agreement, Pageant was deemed to have conveyed back, as of March 9, 2004, a percentage of the VEMRAM Patents and to have granted a gross profits royalty to Estancia Limited such that Pageant would remain holding a 60% interest in the

VEMRAM Patents and it would be required to pay a 32% gross profits royalty to Estancia Limited in respect of the VEMRAM technology.

Critical accounting policies

The Corporation's financial statements are prepared in conformity with Canadian generally accepted accounting principles, which require 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, for, pre-paid and deposits, pre-development costs and capital assets, patent rights and other assets, the Corporation relies 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.

By nature, asset valuations are subjective and do not necessarily result in precise determinations. Should the underlying assumptions change, the estimated net recoverable amounts and net realizable values may change by a material amount. The Corporation's significant accounting policies are set forth in Note 3 to its consolidated financial statements, which should be read in conjunction with management's discussion of the Corporation's critical accounting policies and estimates set forth below.

Commitments

A. Research Collaboration and Infrastructure Agreements:

1. Materials and Manufacturing Ontario:

On October 24, 2002, Micromem entered into a two year Research Collaboration Agreement with Material and Manufacturing Ontario ("MMO"), a not-for-profit organization funded by the provincial government, the University of Toronto ("U of T") and a researcher employed by U of T to fund the research on Magnetic Structure development for Hall effect memory devices.

Under the terms of the agreement, the Company committed to contribute \$87,432 (Cdn \$136,175) and \$18,000 (Cdn \$28,000) in cash and in-kind contribution, respectively, per year to fund the research. As at October 31, 2004, the Company has met all of its obligations under this agreement.

On November 12, 2003, Micromem entered into a second research collaboration agreement with MMO and the U of T for research and development associated with magnetic memory devices. Under the second agreement, in the first year and upon renewal in the second year, MMO will grant \$58,900 (CDN \$85,000) in cash funding and Micromem will contribute \$56,130 (CDN \$81,000) in cash funding and additionally will make \$30,770 (CDN \$44,400) of in-kind contributions, all towards the research collaboration, each year. At October 31, 2004, the Company has met all of its obligations under the agreement.

Micromem will have the first right to sublicense any new technology developed under Research Collaboration Agreements with MMO, with an annual royalty payable to MMO based on a percentage of revenues from the sale of products incorporating the technology developed.

2. University of Toronto:

On November 1, 2002, the Company entered into an Infrastructure Agreement with U of T to fund the assembly of a magnetic memory facility ("MMF") for research, development and fabrication of magnetic memory. U of T has agreed to use the MMF in connection with, among other things, research to be conducted pursuant to collaborations between Micromem and U of T.

Under the agreement Micromem was required to, and did, contribute \$249,463 (CDN \$360,000) in cash to fund the direct costs of the MMF. The contribution has been included as a research and development expense in the consolidated statements of operations and deficit.

3.

Communications and Information Technology Ontario:

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On December 10, 2002, Micromem entered into a two year Collaborative Research Agreement with Communications and Information Technology Ontario ("CITO"), U of T and Dr. Harry Ruda. For the first year, CITO provided funding of \$106,715 (CDN \$154,000) and Micromem contributed \$31,875 (CDN \$46,000). For the second year, CITO provided funding of a further \$107,715 (CDN \$154,000) and Micromem provided funding of a further \$31,875 (CDN \$46,000). Micromem has further provided \$67,632 (CDN \$97,600) of in-kind contributions to the research collaboration.

Micromem will have the first right to sublicense any new technology developed under Collaborative Research Agreement with CITO, with an annual royalty payable to CITO based on a percentage of revenues from the sale of products incorporating the technology developed.

4. Equipment Transfer Agreement:

On March 1, 2003, Micromem entered into an agreement with U of T whereby Micromem has contributed equipment and supplies with an estimated value of \$200,000. The equipment was previously used by Pageant Technologies (U.S.A.) Inc., at Pageant's former Kansas City, Missouri lab facility until its closure in August 2002.

B. Technology development agreement:

On March 14, 2001, the Company's subsidiary, Pageant, entered into a three-year technology development agreement with Estancia and Lienau to continue the development of the Technology. Under the terms of the agreement, Pageant committed to pay Estancia \$215,000 per year, payable on a monthly basis in arrears, and committed to incur expenditures in connection with the development expenses of up to a maximum of \$500,000 per agreement year.

On April 23, 2002, the technology development agreement was amended to extend its term for an additional eight-month period through November 2004. The go-forward payments were renegotiated as \$62,707 between May - October 2002, \$197,086 during fiscal 2003 and \$143,330 during fiscal 2004.

The development efforts under this agreement ceased in July 2002. The Company reports approximately \$287,000 in accounts payable and accrued liabilities with respect to this agreement as of October 31, 2004 (at October 31, 2003: \$143,000).

C. Operating leases:

The Company has operating lease commitments which expire in 2006 in respect of its head office. The future minimum annual lease payments are approximately as follows:

2005	93,500
2006	15,500
	\$ 109,000

Contingencies:

- A. Pageant Technologies (U.S.A.) Inc. has been named as a defendant in legal actions relating to tenant improvements on a leased property, including an action claiming damages of approximately \$887,000 alleging breach of contract under a construction contract entered into by Clear Blue Laboratories, Inc. ("Clear Blue"). The landlord of the leased property is also claiming damages from Pageant Technologies (U.S.A.) Inc. Pageant Technologies (U.S.A.) Inc. assigned its rights under the lease to Clear Blue, however, Pageant Technologies (U.S.A.) Inc. is allegedly obligated to pay the lease payments should the assignee default under the contract. The landlord is claiming damages of approximately \$887,000.

The outcome of these actions is uncertain and Pageant Technologies (U.S.A.) Inc. is vigorously defending all actions in which it is named as a defendant. It is, therefore, not possible to provide an estimate of the financial effects, if any, of the actions. No losses related to these actions have been accrued in these consolidated financial statements. It is possible that the outcome of these claims could represent a material amount.

In the normal course of business, the Company and its subsidiaries are involved in various legal actions. In management's opinion, the ultimate disposition of these actions, individually or in aggregate, will not have a material adverse effect on the financial condition of the Company.

- B. The Company has agreed to indemnify its directors and officers and certain of its employees in accordance with the Company's by-laws. The Company maintains insurance policies that may provide coverage against certain claims.
- C. Under the terms of the Company's Research Collaboration Agreements with Materials & Manufacturing Ontario ("MMO") and the University of Toronto and the Collaborative Research Agreement with Communications and Information Technology Ontario ("CITO"), the Company is committed to potential royalty payments in each case when a license agreement is finalized with respect to any technology developed under such agreements. As and when the research work is completed the Company will have the right to enter into a sub-license agreement with MMO and CITO whereby:
- a. The University of Toronto will retain the right to use the intellectual property developed under each agreement for its research, teaching and administrative purposes.
 - b. MMO or CITO, as the case may be, shall receive an annual royalty payment calculated as:
 - i. A percentage of the revenues generated by the Company from the manufacture and sale of products to the extent that such products directly and specifically pertain to the related intellectual property; and
 - ii. A maximum of a stated percentage of the revenues generated by the Company from the sublicensing of the related Intellectual Property;

subject to an overall total payment of \$500,000. Once the overall payments equal \$500,000, then the future royalty rate is reduced to a stated percentage in each of case (i) and (ii) above.

- D. On March 9, 2004, pursuant to the Asset Purchase Agreement, dated December 10, 2000, between Micromem, Richard Lienau, Estancia Limited and Pageant International, as a result of certain milestones not being met, Pageant International was deemed to have conveyed a 40% undivided interest in the VEMRAM Patents, and to have granted a 32% gross profits royalty to Estancia Limited. As a result, the Company would be required to pay a royalty of 32% of the gross profit realized from each license of the VEMRAM Patents sold or otherwise transferred by Pageant International, less expenses agreed to by the parties, and 32% of any unit royalties received by Pageant International as a result of the license or sale of the VEMRAM Patents less properly documented reasonable expenses directly related to the obtaining of said royalties.

Translation of Foreign Currencies

The functional currency of the Company is the United States dollar. Accounts recorded in foreign currency have been converted to United States dollars as follows:

- • Monetary assets and liabilities are translated at exchange rates at the consolidated balance sheet dates;
- • Non-monetary assets are translated using the historical rate of exchange in effect at the translation dates; and
- • Revenue and expenses are translated using the average monthly rate of exchange, which rate approximates the rate of exchange prevailing at the transaction dates.
- • Gains and losses resulting from the translation are included in the determination of net los for the period.

Pre-development costs

The Corporation is in the development stage. 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.

Research and Development; Patents and Licenses

The Company's research and development activities have been related primarily to research and development of a magnetic random access memory device, and have been funded through research collaboration agreements between Micromem, OCE Inc. and the University of Toronto. Research and development expenses for the year ended October 31, 2004 were \$378,410, for the year ended October 31, 2003 were \$490,914 for the year ended October 31, 2002, were \$1,601,624 and for the year ended October 31, 2001 were \$2,212,679.

Trend Information

The digital memory industry and, more broadly, the semiconductor industry has historically been characterized by wide fluctuations in demand for, and supply of, semiconductors and memory technologies. In some cases, industry downturns have lasted more than a year.

Prior experience has shown that restructuring of operations, resulting in significant restructuring charges, may become necessary if an industry downturn persists.

Due to improved prospects for the economy of the United States and of other parts of the world, many industries may be considering increasing technology purchases and investments. However, the impact of this potential improvement in the economy on us is difficult to predict, as any prospects for revenues is dependent upon the successful completion of the Company's technology development and the incorporation of any technology that may be developed by us or pursuant to our research collaborations with the University of Toronto in the future into new products and their introduction into the market place.

Off-Balance Sheet Arrangements

The Company is not party to any material off-balance sheet arrangements. In addition, we have no unconsolidated special purpose financing or partnership entities that are likely to create material contingent obligations.

ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

A. Directors and Executive Officers

The Directors, Executive Officers and other key personal of Micromem as at October 31, 2004 are set forth below:

<u>Name</u>	<u>Age</u>	<u>Position</u>
Salvatore Fuda	69	Chairman of the Board of Directors
Joseph Fuda	44	President, Chief Executive Officer and Director
Manoj Pundit	40	Executive Vice-President, General Counsel, Secretary and Director
Andrew Brandt	66	Director
Stephen Fleming	55	Director
Charles Harnick	54	Director
George Kennedy	64	Director
David Sharpless	54	Director
Steven Van Fleet	50	Director
Dan Amadori	53	Chief Financial Officer
Cynthia Kuper	32	Chief Technology Officer

Salvatore Fuda

is and has served as Chairman of the Board of Micromem since January 11, 1999 and a Director of Micromem since 1992. He served as President and Chief Executive Officer from June 2000 through to February 13, 2002. From 1992 to January 11, 1999 he also served as Secretary of Micromem. He served as President and Chief Executive Officer of Ontex Resources Limited (TSE) from 1986 to December 1998 and as Chairman of the Board of Ontex Resources Limited since that date. He is and has served as Chairman and director of Pifher Resources Inc. (TSX Venture Exchange) since June 2002. He is the father of Joseph Fuda.

Joseph Fuda

is and has been President, Chief Executive Officer and Director since February 13, 2002. Prior thereto he served as Manager, Strategic Alliances for Micromem since February 2001. Prior thereto, he served as a consultant to Micromem since November 2000. Prior thereto he served as a Vice-President and a Director of IPO Capital Corp since April 1999. Mr. J. Fuda has served as a director of Micromem since February 13, 2002. He is the son of Salvatore Fuda.

Cynthia Kuper

is Chief Technology Officer of the Company and has served in such capacity since January 2005 and prior thereto, she served as Acting Chief Technology Officer of the Company since September 2004. She has 17 years of experience in research and development in the areas of carbon nanotechnologies, solid state materials, molecular biology and genetics. Dr. Kuper has a B.S. in Chemistry and a Ph.D. in Physical Chemistry from Temple University. Upon completion of her Ph.D. in 1999 she pursued a post doctoral fellowship in the laboratories of Nobel laureate Richard Smalley at Rice University, in the Center for Nanoscale Science and Engineering. In 2000 she founded a nanotechnology start-up company, Versilant Nanotechnologies, with initial funding from NASA. Versilant devoted its R&D to enabling areas of carbon nanotechnology for commercial application of the material. In that same year Dr. Kuper founded K1 Consulting, a consulting firm providing services to start-ups, medium sized and large conglomerate companies and investors in nanotechnology. Dr. Kuper has testified before the United States Senate Armed Services Subcommittee on Emerging Threats and Capabilities as a subject matter expert in nanotechnology. She has been featured in many publications, including Newsweek, Fortune Magazine, and the German venture magazine, Borseonline, as an expert in her field and a leading businesswoman. In addition, she serves on various boards including the Nano Business Alliance, Department of Chemical Technology, Philadelphia Community College, and College of Science and Technology Alumni, Temple University, where she served as an adjunct instructor in the chemistry department. She has served as a partner in the Nanobusiness Development Group, a nanobusiness consultancy firm and now serves as an advisor to 21 Ventures, a venture capital group focused in emerging technology start-ups. Dr. Kuper also co-teaches a first of its kind course at Temple University Fox School of Business, where she is an IT Fellow and adjunct professor, on new technologies and business.

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Manoj Pundit is and has served as Micromem's Executive Vice President and General Counsel since July 2000 and joined the Board of Directors in March 2001. He has also been a partner, since December 1996, at Chitiz Pathak LLP (and predecessor firms), a Toronto law firm serving clients in the securities and investment industries, including issuers and dealers and private and public mutual funds and hedge funds. Mr. Pundit has served as securities counsel in connection with public and private offerings, a wide range of securities registration matters and takeover bids. Mr. Pundit holds a LL.M. in Taxation from Osgoode Hall Law school and a LL.B. and B.Sc. (Math) from the University of Alberta.

Andrew Brandt

is and has been Chairman and Chief Executive Officer of the Liquor Control Board of Ontario ("LCBO") since February 1991. The LCBO is the largest single purchaser of alcohol beverage products in the world with annual sales exceeding two billion dollars Canadian. Prior to his appointment to the LCBO, Mr. Brandt served as Leader of the Ontario Progressive Conservative Party from 1987 to 1990. He has previously served as the Minister of Industry and Trade, Minister of Environment and Mayor of Sarnia, Ontario. Mr. Brandt has served as a director of Micromem since June 2000.

Stephen B. Fleming

is and has served as Managing Director of Kismet Limited since June 2001; prior thereto he served as Managing Director of Barefoot Enterprises since April 1999; prior thereto, he served as President of Pageant Technologies (USA) Inc. from July 1997 to April 1999; prior thereto, Mr. Fleming was Executive Vice-President of International Ion from August 1994 to April 1997. Previously, Mr. Fleming was responsible for planning MCI's wireless data products, intelligent network and frame relay international initiatives, and served as director of engineering for international business development for Telecom U.S.A. Mr. Fleming has worked with numerous emerging technology companies in consulting and management capacities. Mr. Fleming has served as a director of Micromem since January 1999.

Charles Harnick

is a founder and a director (since January 2004) of Suasion Public Affairs Management Inc., a public affairs management firm; he is also President and Chief Executive Officer of Ontex Resources Limited (TSE) and has served in such capacities since March 2000. Mr. Harnick has been a practicing lawyer with Sutts, Strosberg LLP since December 2001. He was the Attorney-General of Ontario from June 1995 to June 1999. Mr. Harnick has served as a director of Micromem since June 2000.

George A. Kennedy

is and has served as managing partner of Source International (an international consulting firm in the Metropolitan Washington D.C. area) since March 1997. In 2001, he was Director for Planning and International Development for iGate Inc., a broadband technology company in Louisville, KY. From 1993 until 1996, Mr. Kennedy served as U.S. Consul General in Toronto, Canada, and prior thereto he held senior positions with the US Departments of State and Commerce in Washington D.C. Currently, he is an Executive Editor of the Black Business Journal of Houston, TX. Mr. Kennedy has served as a director of Micromem since June 2000.

David Sharpless

is Chairman of Hunter, Keilty, Muntz, & Beatty Limited, a Toronto-based property and casualty insurance broker. He also serves as Chairman of Maverick Inc., a family investment corporation. From 2000 to September 2001, he was President, International of CIT's Vendor Technology Finance unit. In this capacity, he was responsible for CIT's international vendor finance business, covering CIT's operations in Canada, Europe, Latin America, Asia Pacific, Australia. Prior thereto, Mr. Sharpless was Newcourt Credit Group Inc.'s Deputy Chairman and was responsible for international operations for Newcourt Financial. David is a graduate of Osgoode Hall Law School and is a member of the bar of Ontario. Mr. Sharpless has served as a director of Micromem since March 2001.

Steven Van Fleet

has been the principal of the R&V Group LLC, an RFID business consulting and technology development company. The R and V Group LLC is using state of the art machinery to manufacture RFID labels to EPC Global standards. Between 1999-2003 he served as Program Director for the Silent Commerce/Smart Packaging Initiative at International Paper Company. From January 1999 to November 1999, he was Program Director for Process and Product Uniformity and from March 1996 to December 1998 he was the Director for Control Systems Development at International Paper in Cincinnati, Ohio. He is also presently on the Board of Overseers for the Massachusetts Institute of Technology Auto ID

Center.

Dan Amadori

has served as Chief Financial Officer of Micromem since June 29, 2004. He has also served as Chief Financial Officer of Leader Capital since June 2004 and as a Director and Chair of the Audit Committee of Ontex Resources since September 2003. He is President of Lamerac Financial Corp., a financial

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advisory firm and has held that position since October 1988. Mr. Amadori is a Chartered Accountant and holds an MBA from the Ivey School of Business.

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

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

B. Compensation

Name and Principal Position	Annual Compensation			Long-Term Compensation				All other Compensation (\$)
	Year	Salary (US\$)	Bonus (US\$)	Awards		Payouts		
				Other Annual Compensation (US\$)	Securities Under Options Granted (#)	Restricted Shares or Restricted Share Units (\$)	Long Term Incentive Plan Payouts (\$)	
Joseph Fuda	2004	-	-	-	1,800,000 ²	-	-	52,000
Chief Executive Officer ¹	2003	-	-	-	850,000 ³	-	-	90,000
	2002	100,000	-	-	-	-	-	-
Salvatore Fuda, Chairman Former Chief Executive Officer and President ¹	2004	-	-	-	1,800,000 ²	-	-	-
	2003	-	-	-	1,050,000 ³	-	-	-
	2002	-	-	-	-	-	-	-
Manoj Pundit, Executive Vice President and General Counsel ⁴	2004	-	-	-	1,000,000 ²	-	-	-
	2003	-	-	-	850,000 ³	-	-	90,000
	2002	162,066	-	-	-	-	-	-
Andrew Brandt Director	2004	-	-	-	400,000 ²	-	-	-
	2003	-	-	-	400,000 ³	-	-	-
	2002	-	-	-	-	-	-	-
Stephen Fleming	2004	-	-	-	300,000 ²	-	-	-

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Director	2003	-	-		300,000 ³	-		
	2002	-			-			
Charles Harnick	2004			-	400,000 ²		-	-
Director	2003	-	-		400,000 ³	-		
	2002	-			-			
George A Kennedy	2004			-	300,000 ²		-	-
Director	2003	-	-		300,000 ³	-		
	2002	-			-			

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David Sharpless	2004			-	400,000 ²		-	-
Director	2003	-	-		400,000 ³	-		
	2002	-			-			
Steven Van Fleet	2004	-	-	-	300,000 ²	-	-	-
Director	2003	-	-	-	300,000 ³	-	-	-
	2002	-	-	-	-	-	-	-
Dan Amadori	2004	-	-	-	300,000 ²	-	-	6,000
Chief Financial Officer ⁹	2003	-	-	-	-	-	-	-
	2002	-	-	-	-	-	-	-
Cynthia Kuper ⁶	2004	-	-	-	100,000 ⁵	-	-	10,000
Acting Chief Technology Officer	2003	-	-	-	-	-	-	-
	2002	-	-	-	-	-	-	-
Antonio Lopes	2004	-	-	-	-	-	-	14,000
Former Chief Financial Officer ⁹	2003	-	-	-	300,000 ³	-	-	20,789
	2002	-	-	-	-	-	-	1,590
Dale Hensley	2004	-	-	-	-	-	-	-
Former Chief Operating Officer ⁷	2003	-	-	-	-	-	-	-
	2002	216,577	-	-	500,000 ⁸	-	-	-
Raj Viswanathan	2004	-	-	-	-	-	-	-
Former Chief Financial Officer ⁹	2003	-	-	-	-	-	-	-
	2002	111,583	-	-	400,000 ¹⁰	-	-	-

Notes:

- (1) Salvatore Fuda has served as Chairman since January 11, 1999. He served as President and Chief Executive Officer from June 2000 through to February 13, 2002. Joseph Fuda was appointed Chief Executive Officer on February 13, 2002.
- (2) Each option entitles the holder to purchase one common share of Micromem at \$0.30 prior to expiry on July 18, 2009 and is fully vested.
- (3) Each option entitled the holder to purchase one common share of Micromem at \$0.10 prior to expiry on July 1, 2008.
- (4) Mr. Pundit serves as Executive Vice-President, General Counsel and Secretary of the Corporation.
- (5) Each option entitles the holder to purchase one common share of Micromem at \$0.68 prior to expiry on December 31, 2005 and is fully vested.
- (6) Dr. Kuper has served as Chief Technology Officer of the Company since January 2005, and prior thereto served as Acting Chief Technology Officer since September 2004.

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- (7) Dr. Hensley was employed as Chief Operating Officer from February 21, 2001 to September 24, 2002. For the fiscal years ended October 31, 2001 and 2002, Dr. Hensley was an officer of the Corporation for approximately eight months and 11 months, respectively.
- (8) Each option entitled the holder to purchase one common share of Micromem prior to expiry.
- (9) Mr. Viswanathan was employed as Chief Financial Officer between June 5, 2000 and October 31, 2002. Mr. Lopes served as Chief Financial Officer between November 1, 2002 and June 2004. Mr. Amadori has served as Chief Financial Officer since June 29, 2004.
- (10) Each option entitled the holder to purchase one common share of Micromem prior to expiry.

The aggregate direct compensation paid or accrued on behalf of all other directors as a group during 2004 was nil (2003: \$1,940). This amount includes directors' fees and expenses for non-employee directors. None of the non-employee directors have agreements with Micromem that provide for benefits upon termination of service.

Micromem has adopted a stock option plan. Options are offered to directors, executive officers and employees to purchase Common Shares at an exercise price equal to or above the market price for the Common shares at the date that the options are granted. 5,300,000 options were granted during 2003 and were exercised in 2004. In 2004, 7,150,000 options were granted and are outstanding at October 31, 2004. These options have vested and are exercisable at \$0.30 per share. Additionally 120,000 options were granted in 2004 and were outstanding at October 31, 2004. These options have vested and are exercisable at \$0.68 per share.

C. Board Practices

Committees of the Board

Audit Committee

The board of directors has appointed an Audit Committee consisting of three independent directors. The members of the Audit Committee are Andrew Brandt, Charles Harnick and David Sharpless to serve in such capacity until the next annual meeting. The Audit Committee is responsible for the integrity of the Micromem's internal accounting and control systems. The committee receives and reviews the financial statements of Micromem and makes recommendations thereon to the Board prior to its approval by the full Board. The Audit Committee communicates directly with Micromem's external auditors in order to discuss audit and related matters whenever appropriate.

Compensation Committee

Micromem's board of directors also appointed a Compensation Committee after October 31, 2004. Micromem's executive compensation is administered by the Compensation Committee which meets on executive compensation matters as and when required.

D. Employees

The company has eight officers and employees of which four are in a management capacity, one is in an R&D capacity and three are in an administrative capacity. This includes a Chairman, a Chief Executive Officer and President, an Executive Vice-President and General Counsel, a Chief Financial Officer, a Chief Technology Officer and three support staff, all of whom work from Micromem's executive offices in Toronto, Canada. All research and development is carried out by Dr. Harry Ruda and a research team employed by the University of Toronto under the research collaboration agreements between Micromem and the University of Toronto.

Micromem considers its relations with its employees to be good.

E. Share Ownership

Name	Shares Owned	Options Held	Options Exercise Price	Expiration Date
Joseph Fuda Chief Executive Officer and Director	202,780	1,800,000	\$0.30	7/19/2009
Salvatore Fuda Chairman and Director	2,455,292 ¹	1,800,000	\$0.30	7/19/2009
Manoj Pundit	2,478	1,000,000	\$0.30	7/19/2009

Executive Vice-President, General Counsel and Director				
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Andrew Brandt	3,000	400,000	\$0.30	7/19/2009
Director				
Stephen Fleming	-	300,000	\$0.30	7/19/2009
Director				
Charles Harnick	800	400,000	\$0.30	7/19/2009
Director				
George A. Kennedy	-	300,000	\$0.30	7/19/2009
Director				
David Sharpless	-	400,000	\$0.30	7/19/2009
Director				
Steven Van Fleet	-	300,000	\$0.30	7/19/2009
Director				
Dan Amadori	-	300,000	\$0.30	7/19/2009
Chief Financial Officer		50,000	\$0.91	
Cynthia Kuper	-	100,000	\$0.68	10/06/2009
Chief Technology Officer		300,000	\$0.80	1/09/2007
Jason Baun	-	50,000	\$0.91	7/19/2009
Investor Relations				

Notes:

1. These shares are held by a corporation wholly owned by a trust established for the benefit of members of Salvatore Fuda's family.

ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS

A. Major Shareholders

There are no shareholders who hold a number of common shares of Micromem that is greater than 5% of the common shares outstanding.

B. Related Party Transactions

During fiscal year ended October 31, 2004, the Company paid CDN \$74,901 to a law firm in which Manoj Pundit, a director and officer of the Company, is a partner.

C. Interests of Experts and Counsel

Manoj Pundit, a partner of Chitiz Pathak LLP, who serves as legal counsel to the Company, holds 2,478 common shares of Micromem and 1,000,000 options of Micromem, each option entitling him to purchase one common share of Micromem at \$0.30.

ITEM 8. FINANCIAL INFORMATION

A. Consolidated Statements

See "Item 17 - Financial Statements."

Dividend Policy

Micromem has never paid a dividend on its securities. Micromem does not anticipate paying dividends in the foreseeable future.

Significant Changes

Except as otherwise disclosed in this report, there has been no significant change in Micromem's financial position since October 31, 2004.

C. Legal Proceedings

The Company's subsidiary, Pageant Technologies (USA) Inc. ("Pageant USA"), has been named as a defendant in legal actions relating to tenant improvements on a leased property, including an action claiming damages of approximately \$880,000 alleging breach of contract under a construction contract entered into by Clear Blue Laboratories, Inc. ("Clear Blue"). The landlord of the property is also claiming damages from Pageant USA. Pageant USA assigned its rights under the lease to Clear Blue, however, Pageant USA is allegedly obligated to pay the lease payments should the assignee default under the contract. The landlord is claiming damages of approximately \$887,000.

ITEM 9. THE OFFER AND LISTING

The table below sets forth the high and low sales prices for Common Shares in U.S. Dollars as reported for the periods specified. Micromem's fiscal year ends October 31. The Common Shares are not traded in Canada.

Micromem's common shares are traded in the United States and are quoted on the NASD's OTC Bulletin Board. The common shares are quoted under the symbol MMTIF.OB.

Period	High	Low
Last six months:		
January 2005	0.56	0.17
December 2004	0.23	0.15
November 2004	0.22	0.13
October 2004	0.18	0.08
September 2004	0.22	0.13
Last eight quarters:		
Q4 2004	0.99	0.54
Q3 2004	1.17	0.21
Q2 2004	0.39	0.22
Q1 2004	0.56	0.15
Q4 2003	0.23	0.08
Q3 2003	0.26	0.07
Q2 2003	0.31	0.09
Q1 2003	0.14	0.08
Last four years:		
2004	1.17	0.15
2003	0.31	0.05
2002	1.77	0.05
2001	5.28	1.28
2000	25.13	1.69

On February 23, 2005, the last reported sale price for the common shares on the NASD OTC Bulletin Board was \$0.90.

ITEM 10. ADDITIONAL INFORMATION

A. Share Capital

Not Applicable

B. Memorandum and Articles of Association

Articles of Incorporation

Incorporation Details and Objects of Micromem

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

Summary of Directors Powers and Authorities

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

The Articles of Micromem provide for a minimum of three and a maximum of 12 directors. The OBCA prescribes that an offering corporation must have a minimum of three directors, a majority of whom are Canadian residents and at least one third of whom are not officers or employees of Micromem or its affiliates. The Board of Directors may, between annual shareholders meetings, appoint one or more additional directors to serve until the next annual shareholders meeting provided that the number of directors so added may not exceed by one-third (1/3) the number of directors required to have been elected at the last annual meeting of shareholders.

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

The Board of Directors has broad borrowing powers and may, without authorization from the shareholders, (a) borrow money on the credit of Micromem; (b) issue, re-issue, sell or pledge debt obligations of Micromem; (c) subject to restrictions respecting financial assistance prescribed in the OBCA, give a guarantee on behalf of Micromem to secure the performance of an obligation of any person; and (d) mortgage, hypothecate, pledge or otherwise create a

security interest in all or any property of Micromem, owned or subsequently acquired, to secure any obligation of Micromem.

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

Securities of Micromem

The authorized capital of Micromem consists of an unlimited number of common shares "Common Shares"), of which 58,063,467 shares were issued and outstanding as of October 31, 2004, and 2,000,000 special, redeemable, voting preference shares ("Special Shares"), none of which were outstanding, as of October 31, 2004.

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

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

Rights and Privileges of Shareholders

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

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

C. Material Contracts

1. Equipment Transfer Agreement dated March 1, 2003, between Micromem and the Governing Council of the University of Toronto, pursuant to which the Company conveyed equipment having an estimated value of \$200,000 (CDN \$297,600) to the University for incorporation into the University's magnetic memory facility for the research and development and fabrication of magnetic memory.

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2. Collaborative Research Agreement dated December 10, 2002, among Micromem, Communications and Information Technology Ontario ("CITO"), the University of Toronto and Dr. Harry Ruda, Professor of Physics at the University of Toronto, pursuant to which (i) over a period of two years Micromem is required to contribute \$63,750 (CDN \$92,000) and \$67,632 (CDN \$97,600) of in-kind contribution and, CITO is required to contribute \$215,430 (CDN \$308,000) for research into "High Density Magnetic Memory Device Development"; and (ii) in consideration of such contribution, CITO shall receive a royalty based on revenues received from the sale of products incorporating intellectual property developed under this collaboration agreement for the remaining life of patents issued in connection with such intellectual property.
3. Research Collaboration Agreement, dated October 24, 2002, among Micromem, Materials and Manufacturing Ontario ("MMO"), the University of Toronto and Dr. Harry Ruda, Chair Professor in Nanotechnology, pursuant to which: (i) Micromem has engaged the University of Toronto to conduct research and development of magnetic memory technology; and (ii) Micromem and MMO will each provide \$174,864 (CDN \$272,000) of funding and the combined \$349,728 (CDN \$544,000) will be used to cover the operating expenses of the research collaboration over a term of two years.
4. A second 2-year research collaboration agreement ("Second U of T Research Agreement") dated November 12, 2003, among Materials and Manufacturing Ontario ("MMO") and the University of Toronto, pursuant to which (i) through the collaboration, Micromem has continued its involvement in the research and development of magnetic memory technology, carried out by a highly skilled research team; (ii) Micromem has committed to providing \$56,130 (CDN \$81,000) per year in cash and \$30,770 (CDN \$44,400) per year of in kind contributions and MMO has committed to providing \$58,900 (CDN \$85,000) in cash; (iii) the combined cash contributions of the Company and MMO, \$230,060 (CDN \$332,000), will be used to cover the operating expenses of the research collaboration over a term of two years; (iv) MMO's funding of \$117,800 (CDN \$170,000) (or \$58,900 (CDN \$85,000) per year) will be paid directly to the University of Toronto and therefore is not reflected in Micromem's financial statements; and (v) Micromem maintains its ownership of its portfolio of patents and intellectual property that was developed prior to or outside the scope of the agreement.
5. Asset Purchase Agreement, dated December 10, 2000, among Micromem, Pageant International, Estancia Limited and Richard M. Lienau ("*Lienau*"), pursuant to which: (i) Pageant International purchased from Estancia Limited and Lienau all interests in the VEMRAM Patents and the VEMRAM technology and all other rights, interests and entitlements held by Estancia and Lienau as set forth in the Joint Ownership and Licensing Agreement and a termination of such agreement; and (ii) Micromem is required to pay to Estancia Limited a purchase price of \$50 million, of which \$10 million was paid in cash and shares at closing and the balance of \$40 million being payable in cash and shares upon certain stipulated milestones being achieved;
6. Technology Development Agreement, dated March 9, 2001, as amended on April 23, 2002, among Pageant International, Estancia Limited and Richard Lienau, pursuant to which: (i) Estancia Limited and Richard Lienau are required to provide services to Pageant International in respect of the continued development of VEMRAM technology; and (ii) Pageant International is required to pay monthly fees to Estancia Limited at the rate of \$215,000 per annum over a term of three years and eight months, except that the fees payable during the period from June 1 to December 2002 and during the period from March 9, 2004 through to November 9, 2004 will be at a rate of \$107,000 per annum;
7. Infrastructure Agreement between Micromem and the University of Toronto, dated November 1, 2002, pursuant to which Micromem agreed to provide funding to the University of Toronto in the amount of \$249,463 (CDN \$360,000) for the assembly of a magnetic memory facility to be used for research collaborations between Micromem and the University of Toronto.

D. Exchange Controls

As of the date hereof, the Company is aware of no governmental laws, decrees or regulations in Canada that restrict the export or import of capital, including, but not limited to, foreign exchange controls, or that affect the remittance of dividends or other payments to nonresident holders of Common Shares.

The Company is aware of no limitations under the laws of Canada or the Province of Ontario, or in the charter or any other constituent documents of Micromem on the right of nonresidents of Canada or persons who are not Canadian citizens to hold and/or vote the Common Shares of Micromem.

E. Taxation

Certain Canadian Income Tax Consequences

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

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

Dividends on Common Shares and Other Income

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

The amount of a stock dividend (for tax purposes) would generally be equal to the amount by which the paid up or stated capital of Micromem and increased by reason of the payment of such dividend. Micromem will furnish additional tax information to shareholders in the event of such a dividend. Interest paid or deemed to be paid on Micromem's debt securities held by non-Canadian residents may also be subject to Canadian withholding tax, depending upon the terms and provisions of such securities and any applicable tax treaty.

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

Dispositions of Common Shares

Under the Canadian Tax Act, a non-resident of Canada is subject to Canadian tax on taxable capital gains, and may deduct allowable capital losses, realized on a disposition of "taxable Canadian property". Shares of common stock of Micromem will constitute taxable Canadian property of a shareholder at a particular time if the shareholder used the shares in carrying on business in Canada, or if at any time in the five years

immediately preceding the disposition 25 percent or more of the issued shares of any class or series in the capital stock of Micromem belonged to one or more persons in a group comprising the shareholder and persons with whom the shareholder and persons with whom the shareholder did not deal at "arm's length and in certain other circumstances.

The Convention relieves United States residents from liability for Canadian tax on capital gains derived on a disposition of shares unless:

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

Certain United States Federal Income Tax Consequences

The following is a general discussion of certain possible United States federal income tax consequences, under current law, generally applicable to a US Holder (as defined below) of the Company's common shares. This discussion does not address all potentially relevant federal income tax matters (including but not limited to alternative minimum tax considerations) and it does not address consequences peculiar to persons subject to special provisions of federal income tax law, such as those described below as excluded from the definition of a US Holder. In addition, this discussion does not cover any state, local or foreign tax consequences. See "*Certain Canadian Income Tax Consequences*" above.

The following discussion is based upon the sections of the Internal Revenue Code of 1986, as amended (the "Code"), Treasury Regulations, published Internal Revenue Service ("IRS") rulings, published administrative positions of the IRS and court decisions that are currently applicable, any or all of which could be materially and adversely changed, possibly on a retroactive basis, at any time. This discussion does not consider the potential effects, both adverse and beneficial, of any recently proposed legislation which, if enacted, could be applied, possibly on a retroactive basis, at any time. This discussion is for general information only and it is not intended to be, nor should it be construed to be, legal or tax advice to any holder or prospective holder of the Company's common shares and no opinion or representation with respect to tax consequences to any such holder or prospective holders is made.

Accordingly, holders and prospective holders of the Company's common shares should consult their own tax advisors about the federal, state, local, and foreign tax consequences of purchasing, owning and disposing of the Company's common shares.

US Holders

As used herein, a "US Holder" means a holder of the Company's common shares who is a citizen or individual resident (as defined under U.S. tax laws) of the United States, or, generally a corporation limited liability company, or a partnership created or organized in or under the laws of the United States or of any political subdivision thereof, or a trust whose income is taxable in the United States irrespective of source. This summary does not address the tax consequences to, and a US Holder does not include, persons subject to special provisions of federal income tax law, such as tax-exempt organizations, qualified retirement plans, individual retirement accounts and other tax-deferred accounts, financial institutions, insurance companies, real estate investment trusts, regulated investment companies, broker-dealers, non-resident alien individuals, persons or entities that have a "functional currency" other than the US dollar, shareholders who hold common stock as part of a "straddle", hedging or a conversion transaction and shareholders who acquired their stock through the exercise of employee stock options or otherwise as compensation

for services. This discussion is limited to US Holders who hold the common shares as capital assets. This discussion does not address the consequences to a person or entity holding an interest in a US Holder or the consequence to a person of the ownership, exercise or disposition of any warrants, options or other rights to acquire common shares.

Distributions on Common Shares

Subject to the discussion below at "Other Considerations", US Holders receiving dividend distributions (including but not limited to constructive dividends) with respect to the Company's common shares generally are required to include in gross income for United States federal income tax purposes the gross amount of such distributions equal to the US dollar value of each dividends on the date of receipt (based on the exchange rate on such date) to the extent that the Company has current or accumulated earnings and profits, without reduction for any Canadian income tax withheld from such distributions. Such Canadian tax withheld may be credited, subject to certain limitations, against the US Holder's United States federal income tax liability or, alternatively, may be deducted in computing the US Holder's United States federal taxable income by those who itemize deductions. (See more detailed discussion at "*Foreign Tax Credit*" below.) To the extent that distributions exceed current or accumulated earnings and profits of the Company, they will be treated first as a return of capital up to the US Holder's adjusted basis in the common shares and thereafter as gain from the sale or exchange of the common shares. Preferential tax rates for long-term capital gains are applicable to a US Holder which is an individual, estate or trust. There are currently no preferential tax rates for long-term capital gains for a US Holder which is a corporation.

In the case of foreign currency received as a dividend that is not converted by the recipient into US dollars on the date of the receipt, a US Holder will have a tax basis in the foreign currency equal to its US dollar value on the date of receipt. Generally, any gain or loss recognized upon a subsequent sale or other disposition of the foreign currency, including an exchange for US dollars, will be ordinary income or loss.

Dividends paid on the Company's common shares will not generally be eligible for the dividends received deduction provided to corporations receiving dividends from certain United States corporations. A US Holder which is a corporation may, under certain circumstances, be entitled to a 70 per cent deduction of the United States source portion of dividends received from the Company (unless the Company qualifies as a "foreign personal holding company" or a "passive foreign investment company," as defined below) if such US Holder owns common shares representing at least 10 per cent of the voting power and value of the Company. The availability of this deduction is subject to several complex limitations which are beyond the scope of this discussion.

Foreign Tax Credit

A US Holder who pays (or has withheld from distributions) Canadian income tax with respect to the ownership of the Company's common shares may be entitled, at the option of the US Holder, to either a deduction or a tax credit for such foreign tax paid or withheld. Generally, it will be more advantageous to claim a credit because a credit reduces United States federal income tax on a dollar-for-dollar basis, while a deduction merely reduces the taxpayer's income subject to tax. This election is made on a year-by-year basis and generally applies to all foreign taxes paid by (or withheld from) the US Holder during that year. There are significant and complex limitations which apply to the credit, among which is the general limitation that the credit cannot exceed the proportionate share of the US Holder's United States income tax liability that the US Holder's foreign source income bears to his/her or its worldwide income. In the determination of the application of this limitation, the various items of income and deduction must be classified into foreign and domestic sources. Complex rules govern this classification process. In addition, this limitation is calculated separately with respect to specific classes of income such as "passive income," "high withholding tax interest," "financial services income," "shipping income," and certain other classifications of income. The availability of the foreign tax credit and the application of the limitations on the credit are fact specific, and holders and prospective holders of the Company's common shares should consult their own tax advisors regarding their own circumstances.

Disposition of Common Shares

Subject to the discussion below at "Other Considerations", a US Holder will generally recognize gain or loss upon the sale or other disposition of common shares equal to the difference, if any, between (i) the amount of cash

plus the fair market value of any property received, and (ii) the shareholder's tax basis in the Company's common shares. This gain or loss will be capital gain or loss if the common shares are a capital asset in the hands of the US Holder (and if the stock is not "Section 306 Stock"), which will be a long-term capital gain or loss if the common shares of the Company are held for more than one year and which may be

entitled to a preferential tax rate. Deductions for net capital losses generally may be carried over to be used in later tax years until such net capital loss is thereby exhausted. For US Holders which are corporations (other than corporations subject to Subchapter S of the Code), generally an unused net capital loss may be carried back three years from the loss year and carried forward five years from the loss year to be offset against capital gains until such net capital loss is thereby exhausted.

Other Considerations

In the following circumstances, the above sections of this discussion may not describe the United States federal income tax consequences resulting from the holding and disposition of common shares:

Foreign Personal Holding Company

If at any time during a taxable year more than 50 per cent of the total combined voting power or the total value of the Company's outstanding shares is owned, directly or indirectly (including by attribution), by five or fewer individuals who are citizens or residents of the United States and 60 per cent or more of the Company's gross income for such year (50 per cent in subsequent years) was derived from certain passive sources (e.g., dividends, interests, rents, royalties, etc.), the Company may be treated as a "foreign personal holding company." In that event, US Holders that hold common shares would be required to include in gross income for such year their allocable portions of the Company's taxable income to the extent the Company does not actually distribute such income.

Foreign Investment Company

If 50 per cent or more of the combined voting power or total value of the Company's outstanding common shares are held, directly or indirectly (including through attribution), by citizens or residents of the United States, United States domestic partnerships or corporations, or estates or trusts other than foreign estates or trusts (as defined by Code Section 7701(a) (31)), the Company is found to be engaged primarily in the business of investing, reinvesting, or trading in securities, commodities, or any interest therein, and certain other conditions are met, the Company may be treated as a "foreign investment company" as defined in Section 1246 of the Code, causing all or part of any gain realized by a US Holder selling or exchanging common shares to be treated as ordinary income rather than capital gain.

Passive Foreign Investment Company

As a foreign corporation with US Holders, the Company could potentially be treated as a passive foreign investment company ("PFIC"), as defined in Section 1297 of the Code, depending upon the percentage of the Company's income which is passive, or the percentage of the Company's assets which is producing passive income. Generally, on certain distributions and on disposition, US Holders owning common shares of a PFIC are subject to a special tax regime imposing the highest U.S. ordinary income tax rate plus an interest charge based on the value of deferral of tax for the period during which the common shares of the PFIC are owned. However, if the US Holder makes a timely election to treat a PFIC as a qualified electing fund ("QEF") with respect to such shareholder's interest therein, the above-described rules generally will not apply. Instead, the electing US Holder would include annually in gross income his/her or its pro rata share of the PFIC's ordinary earnings and net capital gain regardless of whether such income or gain was actually distributed. A US Holder making a QEF election can, however, under certain circumstances elect to defer the payment of United States federal income tax on such income inclusions subject to an interest charge on the amount of deferred taxes. Special rules apply to US Holders who own their interests in a PFIC through intermediate entities or persons. In addition, subject to certain limitations, US Holders owning (actually or constructively) marketable stock in a PFIC will be permitted to elect to mark that stock to market annually, rather than be subject to the tax regime described above. Amounts included in or deducted from income under this alternative (and actual gains and losses realized upon disposition, subject to certain limitations) will be treated as ordinary gains or losses.

The Company has not determined whether it is or has been a PFIC in earlier years. US Holders of the Company's common shares should consult with their own tax advisor concerning the possible application of the PFIC provisions in their circumstances.

Controlled Foreign Corporation

If more than 50 per cent of the voting power of all classes of stock or the total value of the stock of the Company is owned, directly or indirectly (including through attribution), by citizens or residents of the United States, United States domestic partnerships and corporations or estates or trusts other than foreign estates or trusts, each of whom own 10 per cent or more of the total combined voting power of all classes of stock of the Company ("United States Shareholder"), the Company is a "controlled foreign corporation". This classification generally results in the inclusion of certain income of a CFC in the US Shareholders' US income as a deemed dividend. In addition, under Section 1248 of the Code, gain from the sale or exchange of stock by a holder of common shares who is or was a United States Shareholder at any time during the five year period ending with the sale or exchange may be treated as ordinary dividend income.

F. Dividends and Paying Agents

Not Applicable

G. Statement by Experts

Not Applicable

H. Documents on Display

Micromem files the documents referred to herein and other information with the SEC, the Ontario Securities Commission ("OSC") and the Alberta Securities Commission ("ASC"). You may inspect and copy such material at the public reference facilities maintained by the SEC at Room 1024, 450 Fifth Street, N.W., Washington, D.C. 20549, as well as at the SEC's regional offices at 500 West Madison Street, Suite 1400, Chicago, Illinois 60661 and the Woolworth Building, 233 Broadway, New York, New York 10279. You may also obtain copies of such material from the SEC at prescribed rates by writing to the Public Reference Section of the SEC, 450 Fifth Street, N.W., Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms.

The SEC maintains an Internet website at

www.sec.gov that contains reports, proxy statements, information statements and other material that are filed through the SEC's Electronic Data Gathering, Analysis and Retrieval ("EDGAR") system. Documents filed with the OSC and the ASC can be accessed through an Internet website at www.sedar.com that contains reports, proxy statements, information statements and other material that are filed through the System for Electronic Document Analysis and Retrieval ("SEDAR").

Information about Micromem is also available on its website at www.micromeminc.com. Such information on its website is not part of this Form 20-F.

I. Subsidiary Information

Not Applicable

ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not Applicable

ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES

Not Applicable

PART II

ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES

Not Applicable

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

Not Applicable

ITEM 15. CONTROLS AND PROCEDURES

The Company's Chief Executive Officer and Chief Financial Officer have evaluated the effectiveness of its disclosure controls and procedures within the 90 days prior to the date of filing of this Annual Report on Form 20-F. The Company operates as a development stage Company and has historically had only limited accounting personnel and resources with which to address its internal control procedures.

When our auditors audited our financial statements as of and for the year ended October 31, 2004, they identified in a letter to our Audit Committee significant deficiencies in our internal accounting controls. They concluded that the significant deficiencies, in aggregate, constitute material weaknesses under standards established by the Public Company Accounting Oversight Board. Significant deficiencies noted included accounts were not analyzed or reconciled on a timely basis and there was limited evidence of review by an individual with direct oversight of the process. They also noted that: (i) we lacked certain formalized accounting policies and procedures, including written procedures for the monthly, quarterly, and annual "closing" of our financial books and records, (ii) staff were not subject to sufficient review and supervision, and (iii) security practices over information technology are not sufficiently robust. Following the receipt of this report by the Company, the Company consulted with its Audit Committee and has determined to commence taking remedial measures to address these deficiencies. These measures will include hiring additional staff, and establishing monthly, quarterly, and annual closing procedures on a go forward basis.

The Company's management intends to take the measures required to remedy the material weaknesses and reportable conditions in the Company's internal controls. These control deficiencies are not expected to have any future material impact on the Company's financial statements. If, however, the Company fails to continue to adequately staff the Company's accounting and finance function and maintain adequate internal controls, the Company may not meet the demands that are placed upon it as a public company, including the requirements of the Sarbanes-Oxley Act of 2002 and the Company's business would accordingly face repercussions.

PART III

Item 16.

Not applicable.

Item 16A

. Audit Committee Financial Expert

Our Board of Directors has determined that a member of our Board of Directors, David Sharpless, is an audit committee financial expert.

Item 16B

. Code of Ethics

We have adopted a code of ethics to impose certain policies relating to ethical conduct on all of our directors and employees, including our chief executive officer, chief financial officer, principal accounting officer and persons performing similar functions. We undertake to provide a copy of our code of ethics to any holder of our securities upon request.

Item 16C. Principal Accountant Fees and Services

The following table presents fees for professional audit services rendered by our auditors for the audit of our consolidated annual financial statements for the years ended October 31, 2004 and 2003, and fees billed for other services rendered by our auditors including our offerings of securities and tax services:

	<u>2004</u>	<u>2003</u>
Audit Fees	\$50,000	\$46,359

Item 16D.

Exemptions from the Listing Standards for Audit Committees

Not applicable.

PART III

ITEM 17. FINANCIAL STATEMENTS

The financial statements required by Item 17 appear commencing on the next page.

Independent Auditors' Report

To the Shareholders of

[Micromem Technologies Inc.](#)

We have audited the accompanying consolidated balance sheet of

[Micromem Technologies Inc. \(a Development Stage Company\)](#) as of October 31, 2004 and the related consolidated statement of operations and deficit, cash flows and shareholders' equity for the year then ended. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance audit standards generally accepted in Canada and standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of

[Micromem Technologies Inc.](#) as of October 31, 2004 and the results of their operations and their cash flows for the year then ended in conformity with Canadian generally accepted accounting principles.

Accounting principles generally accepted in the United States of America are consistent with those applicable in Canada (see Note 16).

The consolidated financial statements as at October 31, 2003 and for the year then ended and for the cumulative period from September 3, 1997 to October 31, 2003 were audited by other auditors who expressed opinions without reservation on those statements in their reports dated December 5, 2003, November 16, 2001, December 13, 2000 and December 20, 1999.

/s/ GRANT THORNTON LLP

Chartered Accountants

Mississauga, Canada
February 11, 2005

Comments by Auditors for U.S. Readers on Canada-U.S. Reporting Difference

In the United States, reporting standards for auditors require the addition of an explanatory paragraph (following the opinion paragraph) when the financial statements are affected by conditions and events that cast substantial doubt on the Company's ability to continue as a going concern, such as those described in note 2 to the consolidated financial statements. Our report to the shareholders dated February 11, 2005 is expressed in accordance with Canadian reporting standards which do not permit a reference to such events and conditions in the auditors' report when these are adequately disclosed in the consolidated financial statements.

/s/ GRANT THORNTON LLP

Chartered Accountants

Mississauga, Canada
February 11, 2005

MICROMEM TECHNOLOGIES INC.

(

A DEVELOPMENT STAGE COMPANY)**CONSOLIDATED BALANCE SHEET****(Expressed in United States dollars)****(See Note 2 - Going Concern)**

As at,	October 31, 2004	October 31, 2003
Assets		
Current assets:		
Cash and cash equivalents	\$ 350,504	\$ 79,233
Term deposits	87,243	219,930
Deposits and other receivables (Note 5)	33,562	47,207
	471,309	346,370
Capital assets (Note 6)	2,925	3,768
Patents and trademarks (Note 7)	-	-
Royalty rights (Note 4 and Note 10)	-	-
	\$ 474,234	\$ 350,138
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 436,624	\$ 245,700
Shareholders' equity:		
Share capital: (Note 8)		
Authorized:		
2,000,000 special preference shares, redeemable, voting		
Unlimited common shares without par value		
Issued and outstanding:		
58,063,437 common shares (2003 - 48,732,187)	32,103,787	31,236,287
Contributed surplus (Note 9)	588,911	578,891
Deficit accumulated during the development stage	(32,655,088)	(31,710,740)
	37,610	104,438
	\$ 474,234	\$ 350,138
Commitments (Note 13)		
Contingencies (Note 14)		

See accompanying notes to the consolidated financial statements.

MICROMEM TECHNOLOGIES INC.

(

A DEVELOPMENT STAGE COMPANY)

Consolidated Statements of Operations and Deficit

(Expressed in United States dollars)

			Period from September 3, 1997	
			to October 31, 20022004	
Twelve-month period ended October 31	2004	2003		
Revenue:				
Interest and other income	\$ 4,746	\$ 20,121	\$ 165,892	\$ 531,384
Costs and expenses (income):				
Administration	157,854	176,361	333,964	2,150,039
Professional fees (Note 8 (b) and 12 (c))	281,371	303,222	262,927	3,164,966
Wages and salaries (Note 12 (b))	31,563	112,437	562,532	9,369,174
Research and development (Notes 6 and 13)	378,410	490,914	1,601,624	6,394,692
Travel and entertainment	77,616	17,508	73,385	1,067,582
Amortization of patents and trademarks	-	36,258	31,338	67,596
Amortization of capital assets (Note 6)	5,410	36,921	40,635	341,541
Operating leases	-	-	-	109,412
Loss on sale of investment	-	-	-	54,606
Write-down of investment	-	-	-	61,020
Write-down of royalty rights (Note 10)	-	-	10,000,000	10,000,000
Write-down of patents and trademarks (Note 7)	-	299,820	-	299,820
Interest expense	-	-	-	75,027
			-	
Loss on sale of capital assets	-	58,302	13,292	65,460
Unrealized foreign exchange loss (gain)	16,870	(61,657)	14,747	(54,140)
	949,094	1,470,086	12,934,444	33,166,795
Loss before income taxes	(944,348)	(1,449,965)	(12,768,552)	(32,635,411)
Provision for (recovery of) income taxes				
(Note 11)	-	-	(35,537)	19,677
Net loss for the period	(944,348)	(1,449,965)	(12,733,015)	(32,655,088)
Deficit accumulated during the development stage, beginning of period	(31,710,740)	(30,260,775)	(17,527,760)	-
Deficit accumulated during the development stage, end of period	\$(32,655,088)	\$(31,710,740)	\$(30,260,775)	\$(32,655,088)

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Loss per share - basic and diluted (Note 8 (c))	\$ (0.02)	\$ (0.03)	\$ (0.27)	\$ (0.75)
Weighted average number of shares	52,958,975	47,061,810	46,396,799	43,528,098

See accompanying notes to the consolidated financial statements.

MICROMEM TECHNOLOGIES INC.

(A DEVELOPMENT STAGE COMPANY)

CONSOLIDATED STATEMENT OF CASH FLOWS

(Expressed in United States dollars)

	Period from			
	September 3,			
	1997 to			
	October 31,			
Twelve-month period ended October 31,	2004	2003	2002	2004
Cash flows from operating activities:				
Net loss for the period	\$ (944,348)	\$ (1,449,965)	\$ (12,733,015)	\$ (32,655,088)
Adjustments to reconcile loss for the period to net cash used in operating activities:				
Amortization of patents and trademarks	-	36,258	31,338	67,596
Amortization of capital assets	5,410	36,921	170,710	526,761
Loss on sale of investment	-	-	-	49,810
Write-down of investment	-	-	-	61,020
Loss on disposal of capital assets	-	58,302	13,292	65,460
Write-down of royalty rights	-	-	10,000,000	10,000,000
Write-down of patents and trademarks	-	299,820	-	299,820
Stock option expense	10,020	-	-	10,020
Share compensation expense	-	-	-	7,285,696
Non-cash wages and salaries	-	-	-	34,000
Change in non-cash working capital items,				
Decrease (increase) in deposits and other receivables	13,645	145,924	35,012	(24,965)
Increase (decrease) in accounts payable and accrued liabilities	190,924	54,181	(138,033)	330,580
Net cash used in operating activities	(724,349)	(818,559)	(2,620,696)	(13,949,290)
Cash flows from investing activities:				
Purchase of capital assets	(4,567)	(2,025)	(28,580)	(729,604)
Proceeds on disposal of capital assets	-	1,688	82,763	134,458
Patents and trademarks	-	(28,380)	(6,065)	(367,416)
Sale of available-for-sale investment	-	-	-	260,641
Royalty rights	-	-	-	(2,000,000)
Term deposits	132,687	(219,930)	-	(87,243)
Net cash provided by (used in) investing activities	128,120	(248,647)	48,118	(2,789,164)
Cash flows from financing activities:				
Issue of common shares	867,500	162,500	-	16,508,233
Net proceeds from shareholder's Loan	-	-	-	544,891
Loan proceeds from Avanticorp International Inc.	-	-	-	112,031
Rights issue costs	-	-	-	(76,197)
Net cash provided by (used in) financing activities	867,500	162,500	-	17,088,958
Increase (decrease) in cash and cash equivalents	271,271	(904,706)	(2,572,578)	350,504
Cash and cash equivalents, beginning of period	79,233	983,939	3,556,517	-
Cash and cash equivalents, end of period	\$ 350,504	\$ 79,233	\$ 983,939	\$ 350,504
Supplemental cash flow information:				

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Interest paid	-	-	\$ 1,960	\$ 76,987
Income taxes paid	-	-	11,508	66,722

See accompanying notes to the consolidated financial statements

MICROMEM TECHNOLOGIES INC.

(A DEVELOPMENT STAGE COMPANY)

Consolidated Statement of Cash Flows (continued)
(Expressed in United States dollars)

Years ended October 31, 2004

Supplemental information on non-cash investing activities:

The following transactions are considered to be non-cash transactions and have been excluded from the consolidated statements of cash flows:

During fiscal 2001, the Company issued 2,007, 831 common shares, being the equivalent of \$8,000,000, in respect of closing of the asset purchase agreement as described in note 4.

During fiscal 2001, common shares having a value \$1,647,703 were issued pursuant to compensation agreements.

See accompanying notes to the consolidated financial statements

MICROMEM TECHNOLOGIES INC.

(A DEVELOPMENT STAGE COMPANY)

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(Expressed in United States dollars)

October 31, 2004

	Number of Shares	Share Capital	Contributed Surplus	Deferred Compensation	Share Deficit Accumulated During Development Stage
Micromem share capital, October 31, 1998					
Exercise of director's stock options	3,490,643	\$ -	\$ -	\$ -	\$ -
Pageant share capital, October 31, 1998	490,000	-	-	-	-
Net loss for the year	-	1	-	-	-
Common shares of Pageant, December 4, 1998	-	-	-	-	(500,992)
	-	4,999	-	-	-
Assigned fair value of net assets (Note 3(b) (iv))	32,000,000	549,140	-	-	-
Micromem share capital, September 11, 1999					
Exercise of common share purchase warrants for cash	35,980,643	554,140	-	-	(500,992)
	120,676	164,053	-	-	-
Private placement of common shares for cash, May 17, 1999	350,000	1,050,000	-	-	-
Shareholder loan forgiven (Note 9)	-	-	544,891	-	-
Exercise of stock options for cash	100,000	300,000	-	-	-
Net loss for the year	-	-	-	-	(5,207,787)
Balance, October 31, 1999	36,551,319	2,068,193	544,891	-	(5,708,779)

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Exercise of common share purchase warrants for cash	182,087	274,717	-	-	-
	100,000	300,000	-	-	-
Exercise of stock options for cash	-	-	2,711,881	(453,219)	-
Deferred share compensation (Note 12 (a))	2,000,000	5,000,000	-	-	-
Private placement of common shares for cash, February 10, 2000	901,110	4,206,447	-	-	-
	-	-	-	-	(7,259,356)
Common shares issued pursuant to compensation agreements, March 15, 2000					
Net loss for the year					
Balance, October 31, 2000	39,734,516	11,849,357	3,256,772	(453,219)	(12,968,135)
Exercise of common share purchase warrants for cash	362,450	554,655	-	-	-
	304,674	1,119,058	-	-	-
Common shares issued under rights offering November 20, 2000	800,000	2,400,000	-	-	-
Exercise of stock options for cash	-	-	(453,219)	453,219	-
Deferred share compensation (Note 12 (a))	-	-	34,000	-	-
	714,686	71,469	-	-	-
Stock-based compensation (Note 8(b))	-	1,581,242	(1,581,242)	-	-
Exercise of director's stock options for cash, January 17, 2001	-	-	(677,420)	-	-
Common shares issued pursuant to compensatory stock options, at January 17, 2001 (Note 12 (a))	11,192	66,461	-	-	-
	2,000,000	4,000,000	-	-	-
Adjustment-share compensation Expenses (Note 12(a))	2,007,831	8,000,00	-	-	-
	-	-	1,431,545	-	-
Common shares issued pursuant to compensation agreement, January 23, 2001(Note 12 (a))	-	-	-	-	-
					(4,559,625)
Private placement of common shares for cash, March 21, 2001					
Common shares issued under asset purchase agreement to Estancia Limited, March 14, 2001					

Compensation shares due but not issued
(Note 12 (a))

Net loss for the year					
Balance, October 31, 2001	45,935,349	\$29,642,242	\$2,010,436	\$ -	\$(17,527,760)

See accompanying notes to the consolidated financial statements

MICROMEM TECHNOLOGIES INC.

(A DEVELOPMENT STAGE COMPANY)

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(Expressed in United States dollars)

October 31, 2004

	Number of Shares	Share Capital Contributed	Deferred Share Compensation	Surplus	Deficit Accumulated
					During Development Stage
Balance, October 31, 2001	45,935,349	\$29,642,242	\$2,010,436		\$ - \$(17,527,760)
Shares issued pursuant to compensatory agreement, March 26, 2002 (Note 12 (a))	765,588	1,431,545	(1,431,545)		- -
	-	-	-		- (12,733,015)
Net loss for the year					
Balance, October 31, 2002	46,700,937	31,073,787	578,891		- (30,260,775)
Private placement of common shares for cash, August 13, 2003 (Note 8(d))	2,031,250	162,500	-		- -
	-	-	-		- (1,449,965)
Net loss for the year					
Balance, October 31, 2003	48,732,187	31,236,287	578,891		- (31,710,740)
Private Placement of common shares for cash, December 2003 (Note 8 (e) ii)	500,000	40,000	-		- -
Private Placement of common shares for cash, December 2003 (Note 8 (e) i)	300,000	33,000	-		- -
Exercise of common share purchase warrants for cash (Note 8(d), August 2004)	2,031,250	162,500	-		- -
Exercise of common share purchase warrants for cash (Note 8 (e) ii), June-September 2004	1,000,000	80,000	-		- -
Exercise of common share purchase warrants for cash (Note 8 (e) i), October 2004	200,000	22,000	-		- -
Exercise of options for cash	5,300,000	530,000	-		- -
Stock options issued to consultant (Note 8 (b))			10,020		
Net loss for the year	-	-	-		- (944,348)
Balance, October 31, 2004	58,063,437	\$ 32,103,787	\$588,991	\$-	\$(32,655,088)

See accompanying notes to the consolidated financial statements

MICROMEM TECHNOLOGIES INC.

(

A DEVELOPMENT STAGE COMPANY)

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

October 31, 2004

1. **Nature of business:**

Micromem Technologies Inc. ("Micromem" or the "Company") is a corporation incorporated under the laws of the Province of Ontario, Canada. By Articles of Amendment dated January 14, 1999, the Company changed its name from Avanticorp International Inc. to Micromem Technologies Inc. On January 11, 1999, the Company acquired all of the outstanding shares of Pageant Technologies Inc. ("Pageant"), a company subsisting under the laws of Barbados. This acquisition, as described in Note 3(b), was recorded as a reverse takeover under Canadian generally accepted accounting principles ("Canadian GAAP").

The Company currently operates in a single segment as a developer of non-volatile magnetic memory technology. To October 31, 2004, the Company has not generated significant revenue and is devoting substantially all of its efforts to the development of its technology. Accordingly, for financial reporting purposes, the Company is a development stage enterprise.

2. **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.

The Company has incurred substantial losses to date. It will be necessary to raise additional funds for the continuing development, testing and commercial exploitation of its technology. The sources of these funds have not yet been identified and there can be no certainty that sources will be available in the future.

The Company continues to pursue its research initiatives as outlined in Note 13 in order to develop its technology for commercial applications. Subsequent to October 31, 2004 the Company has raised additional funds and has hired a new Chief Technology officer for these purposes (Note 17).

The Company's ability to continue as a going concern is in substantial doubt and it is dependent upon completing the development of its technology for a particular application, achieving profitable operations, obtaining additional financing and successfully bringing its technology to the market. The outcome of these matters

MICROMEM TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(Expressed in United States dollars)

October 31, 2004

cannot be predicted at this time. 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 in the carrying value of assets and liabilities, the reported expenses and the balance sheet classifications used.

3. **Summary of significant account policies:**

These consolidated financial statements have been prepared in accordance with Canadian GAAP and are stated in United States dollars. These principles are also in conformity in all material respects with United States generally accepted accounting principles ("U.S. GAAP") as described in Note 16 to the consolidated financial statements. The most significant accounting policies are as follows:

a. Financial reporting:

The Company has adopted Section 1100 of the Canadian Institute of Chartered Accountants ("CICA") Handbook, "Generally Accepted Accounting Principles" ("GAAP"). This section establishes standards for financial reporting in accordance with GAAP and provides guidance on sources to consult with when selecting accounting policies and determining the appropriate disclosures when an item is not explicitly dealt with in the primary sources of GAAP. The Company also adopted Section 1400 of the CICA Handbook, "General Standards of Financial Statement Presentation". This section clarifies what constitutes "fair presentation in accordance with GAAP". The Company also adopted Section 3063 of the CICA Handbook, "Impairment of Long Lived Assets". This section requires the Company to measure and disclose impairments of long lived assets. Adoption of these sections did not have a material impact on the Company's financial statements.

b. Principles of consolidation:

These consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries, Memtech International Inc., Memtech International (U.S.A.) Inc., Pageant Technologies Inc. and Pageant Technologies (U.S.A.) Inc.

MICROMEM TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(Expressed in United States dollars)

October 31, 2004

During the fiscal year ending October 31, 2003, two of the Company's subsidiaries, Micromem Technologies B.V. and Micromem Technologies S.p.A.

were wound up. All significant intercompany balances and transactions have been eliminated upon consolidation.

c. Basis of presentation:

On January 11, 1999, the Company issued 32,000,000 common shares and 1,000,000 warrants to acquire all of the issued and outstanding shares of Pageant. On that date, the total number of the Company shares outstanding was 35,980,643 shares. As a result of this transaction, the shareholders of Pageant owned 88.9% of the outstanding common shares of the Company and, accordingly, the purchase of Pageant was accounted for as a reverse takeover transaction.

Application of reverse takeover accounting results in the following:

- i. the consolidated financial statements of the combined entity are issued under the name of the legal parent, Micromem, but are considered a continuation of the financial statements of Pageant, the legal subsidiary;
- ii. as Pageant is deemed to be the acquirer for accounting purposes, its assets and liabilities are included in the consolidated financial statements at their historical carrying values;
- iii. the operating results for the period from September 3, 1997 to January 11, 1999, which are included in the cumulative operating results through October 31, 2004, are those of Pageant;
- iv. control of the assets and operations of the Company is deemed to be acquired by Pageant effective January 11, 1999. For purposes of this transaction, the deemed consideration is \$549,140 ascribed to the net assets of the Company outstanding immediately prior to the business combination; and
- v. Pageant became a wholly-owned subsidiary of the Company. For accounting purposes, at January 11, 1999, the outstanding shares of the Company, the continuing consolidated entity, consisted of the number of

MICROMEM TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(Expressed in United States dollars)

October 31, 2004

Micromem shares issued to that date with an assigned value equal to the share capital of the continuing consolidated entity at that date as computed below.

The transaction was accounted for by the purchase method with the results of operations included in the consolidated financial statements from the date of acquisition. Details of the Company's net assets acquired and the assigned fair value of net assets at acquisition are as follows:

Cash		\$
Non-cash current assets	168,084	
Investments		115,629
		371,471
		655,184
Less current liabilities		106,044
Assigned fair value of net assets		\$
	549,140	

d. Use of estimates:

The preparation of consolidated financial statements in conformity with Canadian GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

e. Cash and cash equivalents:

Cash and cash equivalents consist of all bank accounts and all highly liquid investments with original maturities of three months or less at the date of purchase.

f. Capital Assets:

Capital assets are recorded at cost less accumulated amortization. Amortization is provided on capital assets on a straight-line basis for a period of up to three years. Capital assets are reviewed for impairment whenever

MICROMEM TECHNOLOGIES INC.

(

A DEVELOPMENT STAGE COMPANY)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(Expressed in United States dollars)

October 31, 2004

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.

g. Patents and trademarks:

Effective November 1, 2001, the Company changed its accounting policy for patents and trademarks to be recorded at cost less accumulated amortization which is provided on a straight-line basis over ten years. In prior years the Company accounted for its patents and trademarks at cost and amortization was to commence on an appropriate basis to charge off the cost over the future benefit period, not exceeding the legal life, when sales commence. There was no material impact on prior years' consolidated financial statements and accordingly, the comparative consolidated financial statements have not been restated.

For the year ended October 31, 2002, the change in accounting policy resulted in an increase in amortization expense and net loss of \$31,338 and there was no material impact on net loss per share.

Patents and trademarks 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 (Note 7).

h. 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. The Company has determined that no development costs have met these criteria at the financial reporting date.

MICROMEM TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)

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

October 31, 2004

i. Stock-based compensation:

The Company has a stock-based compensation plan, which is described in Note 8. Stock-based compensation is recognized by the fair value method, whereby compensation is recorded to the extent that the exercise price is not based on the market value of the Company's common shares at the date of grant. 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.

For all awards of employee stock-based compensation granted after January 1, 2002, the Company recognizes employee stock-based compensation costs under the intrinsic value-based method and provides pro forma disclosure of net income and earnings per share as if the fair value-based method has been applied.

j. Income taxes:

The Company accounts for income taxes by the liability method. Under the 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 not considered to be more likely than not that a future income tax asset will be realized, a valuation allowance is provided.

k. Impairment of long-term assets:

The Company records the value of the long-term assets acquired at cost. Such rights 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 flows.

MICROMEM TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(Expressed in United States dollars)

October 31, 2004

1. Foreign currency translation:

The functional currency of the Company is the United States dollar. The Company's wholly-owned subsidiaries are integrated foreign operations and therefore, the Company uses the temporal method whereby monetary assets and liabilities are translated into United States (U.S.) dollars at the rate of exchange in effect at the consolidated balance sheet dates. Non-monetary assets and liabilities are translated at historical rates. Revenue and expenses are translated using the average monthly rate of exchange, which rate approximates the rate of exchange prevailing at the transaction dates. Gains or losses resulting from translation are included in the determination of net loss for the period.

The Company's monetary assets and liabilities denominated in foreign currencies are translated into United States dollars at the exchange rate in effect at the consolidated balance sheet dates. Non-monetary assets and liabilities that are denominated in currencies other than United States dollars are translated into United States dollars using the historical rate of exchange in effect on the date the transaction occurred. Revenue and expense items are translated using the average monthly rate of exchange, which rate approximates the exchange rate at the date of the transaction. Resulting exchange gains or losses are included in net loss for the period.

4. Acquisition of royalty rights and remaining interest in technology from Estancia Limited:

On December 9, 2000, the Company and its subsidiary, Pageant, entered into an Asset Purchase Agreement (the "Agreement") with Estancia Limited ("Estancia") and Richard Lienau ("Lienau") to purchase the remaining 50% interests in the patents which the Company did not own and a 40% gross profit royalty ("Estancia Royalty"), in respect of certain ferromagnetic memory technology known as VEMRAM (previously known as MAGRAM) and covered by U.S. Patent #5,295,097 and the related patent applications (the "Vemram Patents") described in the Agreement and all rights (the "Technology") held by Estancia and Lienau under the Joint Ownership and Licensing Agreement dated September 17, 1997 among Estancia, Lienau and Pageant. Under the terms of the Agreement, the Company was required to pay a maximum purchase price of \$50,000,000 to Estancia as follows:

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- a. \$10,000,000 was paid on closing (after receipt of regulatory approvals), in the form of \$8,000,000 in common shares of the Company ("Micromem Shares") (based on the price on the closing date) and \$2,000,000 in cash;
- b. \$20,000,000 if and when either (i) certification is received from Honeywell Federal Manufacturing & Technologies ("Honeywell") that fully integrated, randomly addressable memory matrices of the Technology have met certain stipulated performance standards, or (ii) the Company or any of its affiliates executes a definitive agreement for the sale or licensing of the Technology to an arm's length third party for any commercial purposes other than testing or evaluation of the Technology; payable in the form of cash and Micromem Shares to be determined by Pageant provided that a minimum of 50% of the \$20,000,000 shall be paid in Micromem Shares valued at the close of trading on the date of receipt of such certification, sale or licensing; and
- c. \$20,000,000 if and when the Company or any of its affiliates executes a definitive agreement for the sale or licensing with respect to any technology (including the Technology) owned by the Company to an arm's length third party for any commercial purposes other than testing or evaluation of the technology, payable in the form of cash and Micromem Shares to be determined by Pageant provided that a minimum of 50% of the \$20,000,000 shall be paid in Micromem Shares valued at the close of trading on the date of execution of such sale or licensing.

During fiscal 2001, the Company paid \$2,000,000 in cash and issued 2,007,831 shares, being the equivalent of \$8,000,000, the first installment payable under the terms described above, on approval by its shareholders in the annual shareholder meeting held on March 14, 2001. The \$10,000,000 paid was initially recorded as royalty rights in fiscal 2001 and was written-down to nil in fiscal 2002 (Note 10).

On March 9, 2004 the third anniversary of the closing date, the requirements set out in terms (b) and (c) above were not met and, in accordance with the terms of the Agreement, the Company's obligations to pay these amounts terminated. The Company thus has had to revert to Estancia:

1. a 40% interest in the Vemram Patents;

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2. a 32% interest in the gross profit, less expenses agreed to by the parties, for each license of the Vemram Patents sold or otherwise transferred by Pageant; and
3. a 32% interest of any unit royalties received by Pageant as a result of the license or sale of the Vemram Patents less reasonable expenses directly related to the obtaining of said royalties.

5. Deposits and other receivables:

	2004	2003
Sales tax recoverable	\$ 2,429	\$ 7,152
Deposits	15,000	14,536
Other receivables with companies under common control	16,133	25,519
	\$33,562	\$ 47,207

6. Capital assets:

	2003	Additions	2004
Cost:			
Computers and equipment	\$ 36,781	\$ 4,567	\$ 41,348
	\$ 36,781	\$ 4,567	\$ 41,348
	2003	Amortization Expense	2004
Accumulated amortization:			
Computers and equipment	\$ 33,013	\$ 5,410	\$ 38,423
	\$ 33,013	\$ 5,410	\$ 38,423
		2004	2003
Net book value:			
Computers and equipment		\$ 2,925	\$ 3,768
		\$ 2,925	\$ 3,768

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Included in research and development expense is nil (2003 - nil, 2002 - \$130,075) of amortization expense.

During fiscal 2003, the Company contributed equipment and supplies with a net book value of \$58,302 under the "Equipment Transfer Agreement" to the University of Toronto ("U of T") (Note 13a(4)). The net book value of the contributed equipment has been charged to the period as a research and development expense.

7. **Patents and trademarks:**

The Company and its subsidiaries have pending patent applications relating to its memory technologies and the costs relating to legal and filing fees are capitalized as patents.

In 2003 the Company discontinued a number of patent and trademark applications primarily outside the United States and the net book value of \$130,839 relating to these applications was written off in 2003. The Company has also assessed the remaining amounts for patents and trademark applications registered in Canada and United States and has expensed the residual net book value of \$168,981 in 2003 to reflect the uncertain nature of future events.

The Company continues to actively pursue and protect its patents and trademarks registered in Canada and the United States.

8. **Share Capital:**

- a. Authorized:
- 2,000,000 special preference shares, redeemable, voting, none of which are issued and outstanding
- Unlimited common shares without par value.

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b. Stock option plan:

The Company has a fixed stock option plan. Under the Company's Stock Option Plan (the "Plan"), the Company may grant options for up to 13,000,000 shares of common stock to directors, officers, employees or consultants of the Company and its subsidiaries. The exercise price of each option is equal to or greater than the market price of the Company's shares on the date of grant unless otherwise permitted by applicable securities regulations. An option's maximum term under the Plan is 10 years.

A summary of the status of the Company's fixed stock option plan as at October 31, 2004 and 2003 and changes during the years ended on those dates is as follows:

	2004	Weighted Average	2003	Weighted
	Shares in	exercise price	Shares in	Average
	Thousands		Thousands	exercise price
Outstanding, beginning of year	5,300	\$.10	5,380	\$ 4.27
Granted	7,270	.31	5,300	0.10
Cancelled	-	-	(5,380)	4.27
Exercised	(5,300)	.10	-	
Outstanding end of year	7,270	\$.31	5,300	\$0.10
	7,270		5,300	
Options exercisable at year end				
Weighted average price of		\$.31		\$0.06

options granted during the year

In June 2004, 5,300,000 options were exercised resulting in \$530,000 of cash proceeds to the Company.

The following table summarizes information about fixed options outstanding as at October 31, 2004:

Options Outstanding	Weighted average remaining contractual life	Weighted Average exercise	Options exercisable	Weighted

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Actual exercise price	Number outstanding	(in years)	price	Number exercisable	Average exercise price
\$ 0.30	7,150,000	4.67 years	\$0.30	7,150,000	\$ 0.30
0.68	120,000	1.16 years	0.68	120,000	0.68

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The Company does not recognize compensation expense for stock options granted to employees that are exercisable at fair market value at the date of the grant. The table below presents pro forma net loss as if stock options granted to employees had been determined on the fair value-based method. The table includes all stock options granted by the Company.

	2004	2003	2002	Period from Sept. 3, 1997 - Oct. 31, 2004
Loss applicable to				
Common shares:				
As Reported	(\$ 944,348)	(\$1,449,965)	(\$12,733,015)	(\$32,655,088)
Compensation expense				
Pro forma	(1,369,950) (\$2,314,298)	(318,000) (\$1,767,965)	(1,832,500) (\$14,565,515)	(17,829,459) (\$50,484,547)
	2004	2003	2002	Period from Sept. 3, 1997 - Oct. 31, 2003
Basic and fully diluted loss per share:				
Reported	(.02)	(.03)	(.27)	(.74)
Proforma	(.04)	(.04)	(.31)	(1.16)

The fair value of all options granted during 2004 and 2003 were estimated as of the date of grant using the Black Scholes option-pricing model with the following assumptions:

	2004	2003
Divided yield	-	-
Expected volatility	150%	157%
Risk free interest rate	3.25%	2.22%
Expected option life	1.5 Years	1 Year

Included in the total of 120,000 options outstanding at an exercise price of \$.68 per share are 20,000 options issued to a consultant for services provided during 2004. The Company recorded an expense of \$10,020 relating to such options calculated in accordance with the methodology outlined above. This expense is included in professional fees in the consolidated statement of operations.

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c. Loss per share

Basic loss per share is calculated by dividing net loss by the weighted average number of common shares outstanding during the period. Diluted loss per share reflects the dilution that would occur if outstanding stock options and share purchase warrants were exercised or converted into common shares using the treasury stock method and is calculated by dividing net loss applicable to common shares by the sum of the weighted average number of common shares outstanding and all additional common shares that would have been outstanding if potentially dilutive common shares had been issued.

The inclusion of the Company's stock options and share purchase warrants in the computation of diluted loss per share would have an anti-dilutive effect on loss per share and they are therefore excluded from the computation. Consequently, there is no difference between basic loss per share and diluted loss per share.

d. Warrants

On August 13, 2003, the Company issued 2,031,250 First Units at \$0.08 each. Each First Unit provides the holder with one common share and a warrant for one Second Unit at \$0.08 each, exercisable for one year. Each Second Unit provides the holder with one common share and a warrant for one common share at \$0.08 each, exercisable for one year.

In accordance with the CICA's recommendations, a portion of the First Unit should be allocated into separate elements within shareholders' equity as the First

Units contain two equity elements arising from the common share and warrants attached. The Company has allocated the closing trading value of its shares as at August 13, 2003 to the common shares. Since the net proceeds received from the issuance of the common shares attached to the First Units equaled the negotiated trading value at that date as authorized by the Board of Directors, the warrants were allocated a nil value.

Between August - October 2004, the holders of the First Units exercised the First Unit warrants and the Company thus issued 2,031,250 common shares and the warrants for the Second Units and realized proceeds of \$162,500.

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e. Private Placement

- i) In December 2003, the Company completed Unit private placements to two Canadian private investors pursuant to prospectus and registration exemptions set forth in applicable securities laws. Under the private placements, the Company received \$33,000 as subscription proceeds for the sale and issue of 300,000 Units. Each Unit consists of one Common Share and one Series A Warrant. Each Series A Warrant entitles the holder to purchase one Common Share and one Series B Warrant for \$0.11 until expiry 12 months from the date of issue. Each Series B Warrant entitles the holder to purchase one additional Common Share for \$0.11 until expiry 12 months from the date of issue.

In October 2004 the private investors exercised 200,000 Series A warrants and the Company thus issued 200,000 common shares and 200,000 Series B warrants and realized proceeds of \$22,000.

Subsequent to October 31, 2004 the private investors exercised the remaining Series A warrants and the Series B warrants (Note 17 (a) (i)).

- ii) In December 2003, the Company also completed a Unit private placement to one Canadian private investor pursuant to prospectus and registration exemptions set forth in applicable securities laws. Under the private placement, the Company received \$40,000 as subscription proceeds for the sale and issue of 500,000 Units. Each Unit consists of one Common Share and one Series A Warrant. Each Series A Warrant entitles the holder to purchase one Common Share and one Series B Warrant for \$0.08 until expiry 12 months from the date of issue. Each Series B Warrant entitles the holder to purchase one additional Common Share for \$0.08 until expiry 12 months from the date of issue.

In June 2004, the private investor exercised the Series A warrants and the Company thus issued 500,000 common shares and 500,000 Series B warrants and realized proceeds of \$40,000.

In September 2004, the private investor exercised the Series B warrants and the Company thus issued 500,000 common shares and realized proceeds of \$40,000.

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f. Outstanding warrants

The outstanding warrants to acquire common shares are summarized as below:

August 13, 2003 financing (Note 8 (d)):

Series A warrants outstanding at October 31, 2003	2,031,250
Series A warrants exercised in fiscal 2004	(2,031,250)
Series B warrants resulting from exercise of Series A warrants	2,031,250
Outstanding at October 31, 2004	2,031,250

December 2003 financing (Note 8 (e) (i)):

Series A warrants issued	300,000
Series A warrants exercised	(200,000)
Series B warrants resulting from exercise of Series A warrants	200,000
Outstanding at October 31, 2004	300,000

Subsequent to October 31, 2004 the private investors exercised the remaining Series A and Series B warrants (Note 17 (a) (i))

December 2003 financing (Note 8 (e) (ii))

Series A warrants issued	500,000
Series A warrants exercised	(500,000)
Series B warrants resulting from exercise of Series A warrants	500,000
Series B warrants exercised	(500,000)
Outstanding at October 31, 2004	-

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9. **Contributed surplus:**

Included in contributed surplus of \$588,991 at October 31, 2004 (October 31, 2003: \$578,891) is an amount of \$544,891 representing forgiveness of Pageant indebtedness during fiscal 1999 by Ataraxia Corp, the former parent company of Pageant. This forgiven debt was treated as contributed surplus, a separate component of shareholders' equity, as this balance was between related parties.

10. **Restructuring and write-down of royalty rights:**

On July 29, 2002, the Company restructured its operations by closing its research and development facility and adopted a plan to focus its current resources to outsource its research and development activities as described in Note 13(a). No major costs were associated with this restructuring.

As a result of the restructuring, the Company determined that there was significant uncertainty that any amounts would be payable to Estancia in the foreseeable future in respect of the Estancia Royalty as described in Note 4, and accordingly, the Estancia Royalty rights acquired in the amount of \$10,000,000 were written off in fiscal 2002.

11. **Income Taxes:**

The Company has non-capital losses of approximately \$6,551,000 available to reduce future taxable income, the benefit of which has not been recognized in these consolidated financial statements. As at October 31, 2004, the tax losses expire as follows:

	Canada	Other Foreign	Total
2006	\$ 268,000	\$ -	\$268,000
2007	1,632,000	-	1,632,000
2008	1,363,000	-	1,363,000
2009	1,062,000	-	1,062,000
2010	932,000	265,000	1,197,000
2011	-	207,000	207,000
2014	727,000	-	727,000
2023	-	73,000	73,000
2024	-	22,000	22,000
Total losses	\$ 5,984,000	\$567,000	\$ 6,551,000

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The reconciliation of income tax attributable to continuing operations computed at the statutory tax rates to income tax expense is as follows:

	2004	2003
Consolidated accounting loss before income taxes	\$ (944,348)	\$ (1,449,965)
Statutory rates	36%	38%
Expected income tax recovery	(339,965)	(550,987)
Tax benefit not recognized	339,965	550,987
	\$ -	\$ -

Future income taxes reflect the net tax effect of temporary differences between the carrying amount of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's future tax assets and liabilities as at October 31 are as follows:

	2004	2003
Unused capital losses	\$ 47,566	\$ 47,566
Unused non-capital losses	2,244,996	1,975,066
Alternative minimum tax credit	142,091	142,091
Research and development credit	118,720	118,720
Tax basis of capital assets in excess of carrying value	13,680	109,789
Total future tax assets	2,567,053	2,393,232
Valuation allowance	(2,567,053)	(2,393,232)
Net future tax assets	\$ -	\$ -

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12. Management compensation and related party transactions:

a. The Company has previously entered into the following stock-based management compensation arrangements:

i. Effective November 1, 2001, the Company terminated the Chairman's compensation agreement described in Note 12(a) (ii) below and the Chairman's compensation was reduced to \$1.00 per year.

ii. On January 1, 2001, the Company entered into a new employment agreement with the Chairman for a period of five years. Under the terms of this agreement, the Chairman has been retained to provide certain management services to the Company and its subsidiaries. The Company has agreed to issue, under the agreement, a number of fully paid and non-assessable common shares of the Company equal to 0.5% per quarter of the number of common shares of the Company outstanding on the last day of March, June, September and December of each year throughout the term of the agreement. An amount of \$1,431,545 had been accrued for the value of the shares that had been earned but not issued as compensation expense for the year ended October 31, 2001 and treated as contributed surplus within shareholders' equity. On March 26, 2002, the Company issued 765,589 shares relating to compensation for the period ended October 31, 2001, valued at \$1,431,545.

iii. On January 2, 2000, the Company entered into an Employee and Option Agreement with the Chairman of Micromem which was approved by the shareholders at a meeting held on June 29, 2000.

As remuneration for the services to be rendered by the Chairman during the period from January 2, 2000 to January 2, 2001, the Company granted the Chairman an irrevocable option to acquire from the Company a number of fully paid and non-assessable common shares of the Company equal to 1.75% of the number of common shares of the

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Company that would be outstanding on the close of business on January 2, 2001, at a price of \$0.10 per incentive share.

Pursuant to this agreement, deferred share compensation for the Chairman for the period from January 2, 2000 to January 2, 2001 in the amount of \$2,711,811, representing an estimate of the intrinsic value of the options to be granted on January 2, 2001, was recorded as contributed surplus within shareholders' equity. Of this amount, \$2,258,592 was recorded as compensation expense in the year-ended October 31, 2000. On January 17, 2001, the Chairman exercised his options and 714,686 common shares of the Company were issued with an aggregate value of \$1,581,242 which was recorded as share capital. The difference between the actual value of the shares and the estimate recorded in 2000 of \$677,420 was recorded as a recovery of compensation expense in the year ended October 31, 2001.

- iv. On January 29, 1999 and March 10, 1999, the Company entered into two consulting agreements with the Chairman and a company controlled by the former President, respectively. Consideration for services rendered by the Chairman and the former President were settled by issue of common shares. The Company issued 454,292 shares to the Chairman and 448,452 shares to a company controlled by the former President during fiscal 2000. The balance of 11,192 shares (\$66,461) due to a company controlled by the former President were issued in fiscal 2001.

- b. In the normal course of business, the Company has entered into transactions with other companies under common control. These transactions relate to salaries, rent and other expenses which are shared amongst the companies. For the fiscal year ending October 31, 2004, Micromem paid a total of approximately \$92,000 in rent, \$116,000 in salaries and \$5,000 of other expenses and recovered a total of \$182,000 of these costs from other companies under common control (2003: rent

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payment of \$126,000, salary payments of \$28,000, other payments of \$5,000 recoveries of \$47,000).

- c. Included in professional fees as reported are management and consulting fee payments made to various companies whose shareholders serve as officers and directors of the Company. Such payments totaled approximately \$72,000 in 2004 (2003 - \$201,000).

13. **Commitments:**

- a. **Research Collaboration and Infrastructure Agreements:**

- 1. **Materials and Manufacturing Ontario:**

On October 24, 2002, Micromem entered into a two year Research Collaboration Agreement with Material and Manufacturing Ontario ("MMO"), a not-for-profit organization funded by the provincial government, the University of Toronto ("U of T") and a researcher employed by U of T to fund the research on Magnetic Structure development for Hall effect memory devices.

Under the terms of the agreement, the Company has committed to contribute \$87,432 (Cdn \$136,175) and \$18,000 (Cdn \$28,000) in cash and in-kind contribution, respectively, per year to fund the research. As at October 31, 2004, the Company has met all of its obligations under this agreement.

On November 12, 2003, Micromem entered into a second research collaboration agreement with MMO and the U of T for research and development associated with magnetic memory devices. Under the second agreement, in the first year and upon renewal in the second year, MMO will grant \$58,900 (equivalent to Cdn. \$85,000) in cash funding and Micromem will contribute \$56,130 (equivalent to Cdn. \$81,000 in cash funding and additionally will make \$30,770 (equivalent to Cdn. \$44,400) of in-kind

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contributions, all towards the research collaboration, each year. At October 31, 2004, the Company has met all of its obligations under the agreement. Micromem will have sublicensing rights for the use of any new technology developed ("Technology Developed") under this research with an annual royalty payable in perpetuity to MMO based on a percentage of revenues from the sale of products incorporating the Technology Developed.

2. University of Toronto:

On November 1, 2002, the Company entered into an Infrastructure Agreement with U of T to fund the assembly of a magnetic memory facility ("MMF") for research, development and fabrication of magnetic memory. U of T has agreed to use the MMF in connection with, among other things, research to be conducted pursuant to collaborations between Micromem and U of T.

The terms of the agreement provide that Micromem is to contribute \$249,463 (equivalent to Cdn. \$360,000) in cash to fund the direct costs of the MMF. The contribution has been included as a research and development expense in the consolidated statements of operations and deficit.

3. Communications and Information Technology Ontario:

On December 10, 2002, Micromem entered into a two year Collaborative Research Agreement with Communications and Information Technology Ontario ("CITO") U of T and Dr. Harry Ruda. For the first year, CITO provided funding of \$106,715 (equivalent to Cdn. \$154,000) and Micromem contributed \$31,875 (equivalent to Cdn. \$46,000). For the second year, CITO provide funding of a further \$107,715 (equivalent to Cdn. \$154,000) and Micromem provided funding of a further \$31,875 (equivalent to Cdn. \$46,000). Micromem has further provided \$67,632 (equivalent to Cdn \$97,600) of in-kind contributions to the research collaboration.

4. Equipment Transfer Agreement:

On March 1, 2003, Micromem entered into an agreement with U of T whereby Micromem has contributed equipment and supplies with an estimated value of \$200,000 (Note 6). The equipment was previously used by

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Pageant Technologies (U.S.A.) Inc., at Pageant's former Kansas City, Missouri lab facility until its closure in August 2002.

b. Technology development agreement:

On March 14, 2001, the Company's subsidiary, Pageant, entered into a three-year technology development agreement with Estancia and Lienau to continue the development of the Technology. Under the terms of the agreement, Pageant committed to pay Estancia \$215,000 per year, payable on a monthly basis in arrears, and committed to incur expenditures in connection with the development expenses of up to a maximum of \$500,000 per agreement year.

On April 23, 2002, the technology development agreement was amended to extend its term for an additional eight-month period through November 2004. The go-forward payments were renegotiated as \$62,707 between May - October 2002, \$197,086 during fiscal 2003 and \$143,330 during fiscal 2004.

The development efforts under this agreement ceased in July 2002. The Company reports approximately \$287,000 in accounts payable and accrued liabilities with respect to this agreement as of October 31, 2004 (at October 31, 2003: \$143,000).

c. Operating leases:

The Company has operating lease commitments which expire in 2006 in respect of its head office. The future minimum annual lease payments are approximately as follows:

2005	\$ 93,500
2006	15,500
	\$ 109,000

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14. Contingencies:

Pageant Technologies (U.S.A.) Inc. has been named as a defendant in legal actions relating to tenant improvements on a leased property, including an action claiming damages of approximately \$887,000 alleging breach of contract under a construction contract entered into by Clear Blue Laboratories, Inc. ("Clear Blue"). The landlord of the leased property is also claiming damages from Pageant Technologies (U.S.A.) Inc. Pageant Technologies (U.S.A.) Inc. assigned its rights under the lease to Clear Blue, however, Pageant Technologies (U.S.A.) Inc. is allegedly obligated to pay the lease payments should the assignee default under the contract. The landlord is claiming damages of approximately \$887,000.

The outcome of these actions is uncertain and Pageant Technologies (U.S.A.) Inc. is vigorously defending all actions in which it is named as a defendant. It is, therefore, not possible to provide an estimate of the financial effects, if any, of the actions. No losses related to these actions have been accrued in these consolidated financial statements. It is possible that the outcome of these claims could represent a material amount.

In the normal course of business, the Company and its subsidiaries are involved in various legal actions. In management's opinion, the ultimate disposition of these actions, individually or in aggregate, will not have a material adverse effect on the financial condition of the Company.

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

Under the terms of the Research Collaboration and Infrastructure Agreements with MMO (Note 13 (1)) the University of Toronto (Note 13 (2)) and Communications and Information Technology Ontario (Note 13 (3)), the Company is committed to potential royalty payments in each case when a license agreement is finalized with respect to the technology relating to such agreements. As and when the research work is completed the Company will enter into a license agreement whereby:

- a. The collaboration partner in each case shall retain a non-exclusive royalty free worldwide perpetual license to use the Intellectual Property for its research, teaching and administrative purposes only.

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- b. The collaboration partner shall receive an annual royalty payment calculated as:
- i. 4% of the revenues generated by the Company from the manufacture and sale of products to the extent that such products directly and specifically pertain to the related Intellectual Property.
 - ii. A maximum of 20% of the revenues generated by the Company from the sublicensing of the related Intellectual Property,

subject to an overall total payment of \$500,000. Once the overall payments equal \$500,000, then the future royalty rate is reduced to 1% in each of case (i) and (ii) above.

As outlined in Note 4, certain interests under the Agreement with Estancia reverted to Estancia on March 9, 2004. On this basis, to the extent that revenues are generated by the Company relating directly and specifically to the Vemram Patents, the Company is obligated to pay Estancia 32% of the gross profit realized less expenses agreed to by the parties and 32% of any unit royalties realized less direct expenses.

15. **Financial instruments:**

- a. Fair values

The fair values for all financial assets and liabilities are considered to approximate their carrying values due to their short-term nature.

- b. Foreign items

The consolidated financial statements include balances/transactions that are denominated in foreign currencies as follows:

	2004 Canadian Dollars	2003 Canadian Dollars
Assets	\$ 270,999	\$ 343,144
Liabilities	122,561	60,046
Revenue	6,241	8,976
Expenses	973,615	1,574,943

MICROMEM TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

(Expressed in United States dollars)

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

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 respects with U.S. GAAP.

a. Stock-Based compensation:

The Company has chosen to account for employee stock-based compensation using the intrinsic value method prescribed in Accounting Principles Board Opinion No. 25, Accounting for Stock Issued to Employees. Under this method, compensation expense is recorded if the market value exceeds the exercise price at the date of grant. The compensation expense, if any, is recognized at the date of option grants or when the option shares are earned, when future performance is required, in the consolidated statements of operations and deficit.

For the purposes of reporting under U.S. GAAP, companies are required under Statement of Financial Accounting Standard (SFAS) No. 123 to calculate and disclose on a pro forma basis, the compensation expense related to the fair value of the stock options granted during the year in the notes to the consolidated financial statements. Accordingly, for the purpose of reporting under U.S. GAAP, the Company's net loss applicable to common shares and loss per common share would be increased to the pro forma amounts as disclosed in Note 8(b).

In December 2004, the Financial Accounting Standards Board (FASB) issued SFAS No. 123 (revised 2004), "Share-Based Payments". SFAS No. 123(R) would require the Company to measure all employee stock-based compensation awards using a fair-value method and record such expense in its consolidated financial statements. SFAS No. 123(R) is effective beginning in the quarter ending January 31, 2005. The effect of the adoption of SFAS No. 123(R) is expected to be comparable to the effect disclosed on a pro forma basis as a result of applying the current fair-value recognition provisions of SFAS No. 123 as shown in 8(b) herein.

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b. Consolidated statement of comprehensive income (loss):

Comprehensive income (loss) includes all changes in equity during the periods presented except shareholder transactions. For the purpose of reporting under U.S. GAAP, the components of comprehensive income and total comprehensive income are reported in the consolidated statements of changes in shareholders' equity, below net loss in the consolidated statements of operations and deficit and in a separate consolidated statement of comprehensive income. For the periods presented, accumulated other comprehensive loss equals net loss.

17. **Subsequent events:**

a. Since October 31, 2004, the Company has secured additional financing as follows:

- i. \$44,000 of proceeds realized on the exercise of warrants as outlined in Note 8(e) (i).
- ii. In December 2004 the Company completed a Unit private placement to several U.S. investors pursuant to prospectus and registration exemptions set forth in applicable securities laws. Under the private placement, the Company has received \$617,000 as subscription proceeds for the sale and issue of 1,028,344 Units. Each Unit consists of one Common Share and one Series A Warrant. Each Series A Warrant entitles the holder to purchase one Common Share and one Series B warrant for \$.60 until expiry 12 months from the date of issue. Each Series B Warrant entitles the holder to purchase one additional Common Share for \$.60 until expiry 12 months from the date of issue.
- iii. In January 2005, the Company arranged a Unit private placement to several investors pursuant to prospectus and registration exemptions set forth in applicable securities laws. Under the private placement the Company is scheduled to receive up to approximately \$883,000 by February 28, 2005 as subscription proceeds for the sale of up to 1,346,490 Units. Each Unit consists of one Common Share and one Series A Warrant. Each Series A Warrant entitles the holder to purchase one Common Share and one Series B Warrant for \$.65 until expiry 12 months from the issue date. Each Series B Warrant entitles the holder to purchase

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one additional Common Share for \$.65 until expiry 12 months from the date of issue.

iv. In February 2005 the Company completed a Unit private placement to one Canadian investor pursuant to prospectus and registration exemptions set forth in applicable securities laws. Under the private placement, the Company received \$10,500 as subscription proceeds for the sale and issue of 14,000 Units. Each Unit consists of one Common Share and one Series A Warrant. Each Series A Warrant entitles the investor to purchase one Common Share and one Series B Warrant for \$.75 until expiry 12 months from the date of issue. Each Series B Warrant entitles the holder to purchase one additional common share for \$.75 until expiry 12 months from the date of issue.

b. In January 2005 the Company entered into an employment agreement with an arm's length individual for her services as Chief Technology Officer of the Company. The agreement extends for 2 years with a cancellation clause which can be executed by the Company at any time with 4 months notice provided. The base remuneration stipulated in the agreement is \$260,000 per year. The company also granted the Chief Technology Officer 300,000 in options exercisable at \$0.80 per share, expiring 45 days after the end of the above noted employment agreement.

c. On February 10, 2005 the Board approved a resolution to issue 100,000 options under the Company's Stock Option Plan with an exercise price of \$0.91 per share. These options were awarded to an officer and an employee of the Company.

18. **Comparative consolidated financial statements:**

Comparative consolidated financial statements have been reclassified from statements previously presented to conform to the presentation of the 2004 financial statements.

ITEM 18. EXHIBITS

The following exhibits are filed as part of this registration statement and attached hereto:

- Exhibit No. 1 Articles of Incorporation of Micromem Technologies Inc. and amendments thereto in effect as of January 11, 2000, (Incorporated herein by reference to the Company's Form 20-F/A filed with the Commission on January 11, 2000).
- Exhibit No. 1.2 Articles of Amendment of Micromem Technologies Inc. dated as of October 17, 2001 amending the Articles of Micromem Technologies Inc. to increase the number of directors to a minimum of three and a maximum of ten (Incorporated herein by reference to the Company's Form 20-F/A filed with the Commission on March 20, 2003);
- Exhibit No. 1.3 Articles of Amendment of Micromem Technologies Inc. dated as of June 24, 2002 amending the Articles of Micromem Technologies Inc. to increase the number of directors to a minimum of 3 and a maximum of 12 (Incorporated herein by reference to the Company's Form 20-F/A filed with the Commission on March 20, 2003);
- Exhibit No. 1.4 By-Laws of Micromem Technologies Inc. in effect as of January 11, 2002, (Incorporated herein by reference to the Company's Form 20-F/A filed with the Commission on January 11, 2000);
- Exhibit No. 1.5 Amendment to the By-Laws of Micromem Technologies Inc. approved by shareholders on June 29, 2000, deleting the requirement from the By-Laws that the President shall be appointed from amongst the directors (Incorporated herein by reference to the Company's Form 20-F/A filed with the Commission on March 20, 2003);
- Exhibit No. 4.1 Research Collaboration Agreement among Micromem Technologies Inc., the University of Toronto, Dr. Harry Ruda and Materials and Manufacturing Ontario dated October 24, 2002 (referred to in this Annual Report at Item 4.B - Business Overview - Recent Developments) (Incorporated herein by reference to the Company's Form 20-F/A filed with the Commission on March 20, 2003);
- Exhibit No. 4.2 Asset Purchase Agreement among Micromem Technologies Inc., Pageant Technologies Incorporated, Estancia Limited and Richard Lienau dated December 10, 2000 (referred to in this Annual Report at Item 4.B - Business Overview - Recent Developments), (Incorporated herein by reference to the Company's Form 40-F filed with the Commission on February 2, 2001);
- Exhibit No. 4.3 Technology Development Agreement among Pageant Technologies Incorporated, Estancia Limited and Richard Lienau dated March 9, 2001 (referred to in this Annual Report at Item 4.B - Business Overview - Recent Developments), (Incorporated herein by reference to the Company's Form 40-F filed with the Commission on February 2, 2001);
- Exhibit No. 4.4 Infrastructure Agreement between Micromem Technologies Inc. and the University of Toronto dated November 1, 2002 (referred to in this Annual Report at Item 4.B - Business Overview - Recent Developments) (Incorporated herein by reference to the Company's Form 20-F/A filed with the Commission on March 20, 2003);
- Exhibit No. 4.5 A second 2-year research research collaboration agreement dated November 12, 2003, among Micromem, Materials and Manufacturing Ontario and the University of Toronto (referred to in this Annual Report at "Item 10.C - Material Contracts"), (Incorporated herein by reference to the Company's Form 20F filed with the Commission on March 19, 2004);

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Exhibit No. 4.6	Equipment Transfer Agreement dated March 1, 2003 between Micromem and the Governing Council of the University of Toronto (referred to in this Annual Report at Item 10.C - Material Contracts"), (Incorporated herein by reference to the Company's Form 20F filed with the Commission on March 19, 2004);
Exhibit No. 4.7	Collaborative Research Agreement dated December 10, 2002 among Micromem, Communications and Information Technology Ontario ("CITO"), the University of Toronto and Dr. Harry Ruda (referred to in this Annual Report at "Item 10.C - Material Contracts"), (Incorporated herein by reference to the Company's Form 20F filed with the Commission on March 19, 2004);
Exhibit No. 12.1	Officer's Certification pursuant to Section 302 of the Sarbanes Oxley Act, 2002
Exhibit No. 12.2	Officer's Certification pursuant to Section 302 of the Sarbanes Oxley Act, 2002
Exhibit No. 13.1	Officer's Certification pursuant to Section 906 of the Sarbanes Oxley Act, 2002
Exhibit No. 13.2	Officer's Certification pursuant to Section 906 of the Sarbanes Oxley Act, 2002
Exhibit No. 14	Independent Auditors' Consent

SIGNATURES

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the Registrant certifies that it meets all of the requirements for filing on Form 20-F and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized.

MICROMEM TECHNOLOGIES INC.

By: /s/ Joseph Fuda
Name: Joseph Fuda
Title: Chief Executive Officer

By: /s/ Dan Amadori
Name: Dan Amadori
Title: Chief Financial Officer

Dated: February 25, 2005