

**Micromem Technologies Inc.**  
(A development stage company)

**Management's Discussion and Analysis**

For the nine-month period ended July 31, 2004

The following discussion and analysis is intended to provide greater details of the results of operations and financial condition of the Company during the period. Certain statements under this caption constitute "forward-looking statements" which are subject to certain risks and uncertainties. The Company's actual results may differ significantly from the results discussed in such forward-looking statements.

**1.1 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 in its development stage and is still in the development stage. 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.

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.

**1.2 Results of Operations**

**Nine months ended July 31, 2004 compared to Nine months ended July 31, 2003**

The Company had no operating revenue in the period, its only activities being the development of its memory technologies under research collaboration with the University of Toronto as discussed below. Its only income during the period was \$4,629 being interest earned on excess funds retained as deposits with banks, compared to \$17,085 for the same period in 2003.

Costs and expenses decreased to \$507,668 during the period in 2004 from \$824,547 during the same period in 2003.

The Company continued to focus its efforts in progressing the research and development of its memory technologies by incurring \$160,163 during the period ended July 31, 2004 compared to \$434,319 for the same period in 2003. The current year expenses relate to payments under the various research agreements with the University of Toronto. The Company continues to meet its commitments on the various research agreements. The research continues to make progress in moving to the integration phase.

All support costs as detailed are in line with the reduced operations of the Company and the Company's commitment to further its development program:

- ?? Professional fees increased 74% to \$121,762 during the period in 2004 from \$70,063 in 2003. The current professional fees are primarily related to the Company's continued commitment to filing and maintaining patent applications primarily in the United States and expenses incurred to

meet the continued filing requirements in the United States and Canada. It also includes legal fees paid by Pageant Technologies relating to the Greenwood Construction case.

?? Wages and salaries decreased 56% to \$46,658 from \$106,475 in 2003 primarily due to the CEO and another executive not receiving compensation for their services with effect from January 2004. The Company has 6 employees and the costs related to the other employees are expected to remain at these levels as the Company continues to outsource the research activities and therefore has minimum infrastructure requirements.

?? Administration expenses decreased 22% to \$113,576 from \$144,927 in 2003. These costs relate primarily to Insurance of \$14K, shareholder information relating to the annual meeting of \$4K, transfer agency fees of \$3K, rent and utilities of \$3K and other general costs. The Company has sublet a part of the unused premises to other Companies consequent to downsizing and will continue to look for other cost-cutting opportunities. The administration expenses are expected to remain at these levels for the rest of the fiscal year.

The Company reports a net loss of \$503,039 for the nine-month period ended July 31, 2004 (\$0.009 per share), a decrease of 38% from the net loss of \$807,462 reported for the nine-month period ended July 31, 2003 (\$0.017 per share).

### 1.3 Summary of Quarterly Results

#### Unaudited quarterly financial information

(all amounts in United States dollars)									
Quarter ended,	July 31,	April 30,	January 31,	October 31,	July 31,	April 30,	January 31,	October 31,	July 31,
	2004	2004	2004	2003	2003	2003	2003	2002	2002
Total Revenue	450	3,658	521	\$ 3,035	\$ 640	\$ 1,435	\$ 15,011	\$ 57,743	\$ 27,931
Loss for the period	239,869	70,876	192,294	617,095	145,114	501,189	186,567	10,423,341	628,603
Loss per share:									
Basic and diluted	0.004	0.001	0.004	0.012	0.003	0.011	0.004	0.22	0.01

Notes:

1. The reported loss for the quarter ended October 31, 2002 arose principally from a \$10,000,000 write down of royalty rights in that quarter, (the effect of which was \$0.22 per share).

### 1.4 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 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.

Since November 1, 2003 the Company has raised \$643,000 through equity private placements and exercise of options, to fund its working capital requirements.

As of July 31, 2004 the Company had working capital of \$241,860 including a cash balance of \$285,272. The Company must raise additional funds to meet its working capital requirements for the rest of the year. The Company is actively pursuing discussions with potential investors to meet these requirements.

## **1.5 Capital Resources**

Micromem had no material commitments for capital expenditures as of July 31, 2004 or 2003. In March 2001, Micromem and Pageant International Inc. ("Pageant") completed an asset purchase agreement with Estancia Limited and Richard Lienau, which provided for the purchase of all interests and royalties in respect of VEMRAM<sup>®</sup> technology and all rights, entitlements and interests held by Estancia Limited and Richard Lienau under the Joint Ownership and Licensing Agreement dated as of September 17, 1997. The total consideration payable in respect of the purchased assets is \$50 million U.S. dollars in the form of cash and shares. Of this amount, \$10 million U.S. dollars was paid at closing through a cash payment of \$2.0 million U.S. dollars and the issuance by Micromem of 2,007,831 common shares valued at \$3.98 U.S. dollars per share. The balance of \$40 million U.S. dollars will be payable in two equal amounts of \$20 million U.S. dollars each upon achievement of certain milestones provided that a minimum of 50% of each \$20 million U.S. dollars payment shall be in the form of shares of Micromem.

As no further payments toward the purchase price were made to Estancia under the Asset Purchase Agreement, Pageant has conveyed back a percentage of the VEMRAM<sup>™</sup> Patents and granted a gross profits royalty to Estancia Limited such that Pageant would remain holding a 60% interest in the VEMRAM<sup>™</sup> Patents and it would be required to pay a 32% gross profits royalty to Estancia Limited in respect of the VEMRAM<sup>™</sup> technology.

## **1.6 Off-Balance Sheet Arrangements**

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

## **1.7 Related Party Transactions**

In the normal course of business, the Company enters into transactions with companies under common control. Such transactions are measured at mutually agreed upon exchange amounts and are reflected in the consolidated financial statements.

## **1.8 Significant accounting policies**

### **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.

### **Patents and trademarks:**

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.

**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.

**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 Canadian dollars using 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 at rates of exchange prevailing at the transaction dates. Gains or losses resulting from translation are included in the determination of net loss for the period.

**1.9 Outstanding Share Data**

The Company has 55,332,187 common shares issued and outstanding as of July 31, 2004.

Additionally the Company has a number of Options issued to employees and Warrants issued as part of a Private Placement of shares, as further described below, certain of which were exercised during the quarter:

- ?? In August 2003, the Company completed Unit private placements to 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 December 2003, the Company completed Unit private placements to 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 December 2003, the Company also completed a Unit private placement with a private investor. 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, 500,000 Series A warrants were exercised at a price of .08 per warrant resulting in \$40,000 of proceeds to the Company.
- ?? In June 2004 a total of 3,250,000 stock options previously awarded under the Company's Employee stock option plan were exercised at a price of \$0.10 per option, resulting in \$325,000 proceeds to the Company.
- ?? In July 2004 a total of 7,150,000 stock options were granted to various directors, management and staff. The exercise price for these options which expire if unexercised on July 18, 2009, is US\$0.30 per share.

### **1.10 Financial Instruments and Other Instruments**

The fair values for all financial assets and liabilities are considered to approximate their carrying values due to their short-term nature. The Company does not have any derivative contracts.

### **Risk Factors**

The Company and the Company's investors face a number of significant risks, which remain substantially unchanged from those described in Part I, item 3D, "*Risk Factors*", of the Company's 2003 Annual Report on Form 20-F filed with United States Securities and Exchange Commission (and filed with the Ontario, Alberta, British Columbia and Manitoba Securities Commission through "Sedar").