

MICROMEM TECHNOLOGIES INC.
777 Bay Street, Suite 1910, Toronto, Ontario M5G 2E4

PROXY

PROXY SOLICITED BY THE MANAGEMENT OF THE CORPORATION, for the **Annual and Special Meeting of Shareholders to be held on Friday, May 27, 2005**. The undersigned shareholder of Micromem Technologies Inc. (the "Corporation") hereby **appoints Joseph Fuda or, failing him, Manoj Pundit or instead of either of them, _____ as proxy, with power of substitution, to attend and vote for the undersigned** at the Annual and Special Meeting of Shareholders of the Corporation to be held at the **Albany Club, 91 King Street East, Toronto, Ontario, M5C 1G3**, at 2:30 p.m. (Eastern) on **Friday, May 27, 2005**, and at any adjournments thereof, and without limiting the general authority and power hereby given, the persons named above are specifically directed to vote as follows:

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| 1. | For [] | Election of directors as nominated by management. |
| | Withhold [] | |
| 2. | For [] | Appointment of Grant Thornton LLP, Chartered Accountants, as auditors of the Corporation and authorizing the directors to fix their remuneration. |
| | Withhold [] | |
| 3. | For [] | Increase the number of common shares reserved for issuance under stock options granted under the Corporation's Stock Option Plan by 5,000,000. |
| | Against [] | |
| 4. | For [] | Authorization for the Corporation to issue common shares pursuant to private placement agreements with arm's length subscribers, public distributions or as consideration for the acquisition of assets by the Corporation during the ensuing 12-month period. |
| | Against [] | |
| 5. | For [] | Authorization for the Corporation to issue common shares pursuant to a proposed compensation arrangement for the Chairman of the Corporation. |
| | Against [] | |
| 6. | For [] | Ratification, approval and confirmation of all acts of the directors and officers of the Corporation since the last annual and meeting of the Corporation. |
| | Against [] | |
| 7. | In their discretion, with respect to each matter hereinbefore specified as to which choice has not been specified, or any amendments or variations to the matters hereinbefore specified, or on such further or other business as may properly come before the meeting or any adjournments thereof. | |

TO BE VALID, THIS PROXY MUST BE RECEIVED BY THE CORPORATION'S TRANSFER AGENT, Equity Transfer Services Inc., 120 Adelaide Street West, Suite 420, Toronto, Ontario, M5H 4C3, NOT LATER THAN 4:00 P.M., TORONTO TIME, ON THURSDAY, MAY 26, 2005 OR DELIVERED TO THE CHAIRMAN OF THE MEETING AT THE BEGINNING OF THE MEETING.

This proxy revokes and supersedes all proxies of earlier date.

THIS PROXY MUST BE DATED.

DATED this _____ day of _____, 2005.

Name of Shareholder (please print): _____

Signature of Shareholder: _____

Number of Common Shares Held: _____

NOTES

1. The Shares represented by this proxy instrument will be voted. The proxy confers authority for the above named to vote in his discretion with respect to amendments or variations to the matters identified in the Notice of Meeting accompanying the proxy instrument or other matters which may properly come before the meeting.
2. **Each shareholder has the right to appoint a person to represent him or her at the meeting other than the person specified above.** Such right may be exercised by inserting in the blank space provided the name of the person to be appointed, who need not be a shareholder of the Corporation.
3. Please sign exactly as your name appears on the back of the proxy and date the proxy. If the shareholder is a corporation, the proxy must be executed by an officer or attorney thereof duly authorized.
4. If the form of proxy is not dated in the space provided, it is deemed to bear the date of its mailing to the shareholders of the Corporation.
5. If the shareholder appoints the person designated above as his proxy to attend and act at the said meeting:
 - a) the shares represented by the proxy will be voted in accordance with the instructions of the shareholder or any ballot that may be called for;
 - b) where the shareholder specifies a choice in the proxy with respect to any matter to be acted upon, the shares represented by the proxy shall be voted accordingly; and
 - c) IF NO CHOICE IS SPECIFIED WITH RESPECT TO THE MATTERS IDENTIFIED IN ITEMS NO. 1 THROUGH 5 ABOVE, THE PROXY WILL BE VOTED FOR SUCH MATTERS.