



**FOR IMMEDIATE RELEASE**

**May 24, 2007**

## **MICROMEM TECHNOLOGIES TESTS RADIATION HARDNESS WITH GREAT SUCCESS**

TORONTO, ONTARIO, May 24, 2007 – Micromem Technologies Inc. [OTC BB: MMTIF] announced today that it has achieved success in tests of radiation hardness on its device components. Samples prepared by Dr. Harry Ruda at the University of Toronto were exposed to various levels of Cobalt 60 gamma radiation. This form of radiation is one of the toughest forms and even after exposure at the highest levels of radiation the materials performed perfectly.

Samples of pHEMT (High Electron Mobility Transistor structures) GaAs were prepared to mimic the bit cell environment of the company's Hall Sensing MRAM. The samples were then sent for exposure to Cobalt 60 gamma radiation in an industrial medical device sterilization chamber.

The samples were exposed to three different doses of radiation as follows (each dose is reported within +/- 5 kGy):

<b>Low level:</b>	Min. 26.371 kGy to max 31.603 kGy
<b>Mid level:</b>	Min. 45.163 kGy to Max. 52.005 kGy
<b>High level:</b>	Min. 95.139 kGy to Max. 112.747 kGy

Researchers at the University of Toronto then tested the samples. The test concluded the device's functioning and capabilities remained unaltered by even the highest level of radiation exposure. These initial results were taken at room temperature. The only effects of the radiation exposure that could be seen were at temperatures below -70°C. During actual use the device would not be exposed to such extreme temperatures.

The measurements showed that the samples made highly sensitive Hall sensors and were able to function as a memory element after dosing with high levels of radiation.

The next steps have already begun which include making and testing fully integrated bit cells fabricated at the University of Toronto. The company plans to move forward with its testing by fabricating scaled samples inside a fabrication facility. These scaled prototypes will be tested for use as radiation hardened memory components for sale into the medical device industry, as well as aerospace, defense and pharmaceuticals.

For further information contact: Jason Baun, Chief Information Officer 1-877-388-8930

Listing: NASD OTC-Bulletin Board - Symbol: "MMTIF"

Shares issued: 70, 079, 449

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### **About Micromem Technologies Inc.**

Micromem Technologies, Inc. ([www.micromeminc.com](http://www.micromeminc.com)) is focused on the development of magnetic random access memory (MRAM) technology. We believe that once fully developed, this technology will be suitable for various applications including, without limitation, Radio Frequency Identification (RFID). It is anticipated that RFID will be Micromem's first market objective. Micromem's primary technology was developed pursuant to an exclusive world wide commercial license issued by the University of Toronto ("UT"). Pursuant to the terms of the license, Micromem can buy out the balance of its financial obligations with respect to the patents and technology licensed by UT for a fixed fee. The MRAM development work was undertaken in accordance with research collaboration agreements among Micromem, the University of Toronto, Dr. Harry Ruda and OCE Inc., a not-for-profit corporation supported through the Ontario Ministry of Economic Development and Trade's (MEDT) Ontario Centres of Excellence program.

*Statements in this news release that are not historical facts, including statements about plans and expectations regarding products and opportunities, demand and acceptance of new or existing products, capital resources and future financial results are forward-looking. Forward-looking statements involve risks and uncertainties, which may cause Micromem's actual results in future periods to differ materially from those expressed or suggested herein. These uncertainties and risks include, without limitation, the inherent uncertainty of research, product development and commercialization, the impact of competitive products and patents, our ability to fund our current and future business strategies and respond to the effect of economic and business conditions generally as well as other risks and uncertainties detailed from time to time in Micromem's filings with the Securities & Exchange Commission. There can be no guarantee that Micromem will be able to enter into any commercial arrangements on terms that are favorable to it, or at all. For more information, please refer to Micromem's Annual Report on Form 20-F and its Form 6-Ks as filed with the U.S. Securities and Exchange Commission. Micromem is under no obligation (and expressly disclaims any obligation) to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.*