



FOR IMMEDIATE RELEASE

**Micromem Technologies Executes Manufacturing Supply Agreement
with Life Medical Technologies**

***Opens significant market opportunities in medical device industry: MASTInc to supply
magnetic sensor technology for breast health product line***

TORONTO, NEW YORK, N.Y.—August 13, 2009 — Micromem Technologies Inc., (Micromem) (OTC BB: MMTIF, CNSX: MRM) through its wholly owned subsidiary Micromem Applied Sensor Technologies, Inc. (MASTInc) (www.mastinc.com), today announces a manufacturing supply agreement with Life Medical Technologies Inc. (LMTI) (www.lifemt.com), a company focused on providing innovative medical health care products and education worldwide. Under the terms of this agreement Micromem will incorporate its magnetic sensor technology into a state of the art device jointly developed with LMTI that we believe could enhance the early detection of breast cancer.

“This relationship with Life Medical creates significant sales opportunities for MAST Inc, assisting to establish the company’s position as a leading supplier of sensor technology for the medical device marketplace,” says Steven Van Fleet, President of MASTInc. “MASTInc will complete development of a circuit form factor product via Life Medical’s design input and procedures. We are pleased to participate in the development of a device that enhances total breast health.”

MASTInc’s circuit design will allow for external reading of the magnetic sensors and be able to transmit information directly from the home over the Internet.

Van Fleet concludes, “Micromem sensors, with high sensitivity, competitive pricing and small size will play an important role in bringing the device to market. As a result, more women will have the option to take advantage of this affordable adjunctive screening technology.”

In addition Micromem is pleased to announce the appointment of Carol Fitzgerald, CEO of Life Medical, to the Advisory Committee of MASTInc. Carol Fitzgerald has over 25 years of specialized marketing, operations and executive management experience with companies ranging from start-up organizations to Fortune 500 companies.

About Micromem and MASTInc

MASTInc is a wholly owned U.S.-based subsidiary of Micromem Technologies Inc., a publicly traded (OTC BB: MMTIF, CNSX: MRM) company. MASTInc responsibly analyzes the specific industry sectors to create intelligent game-changing applications that address unmet market needs. By leveraging its expertise and experience with sophisticated magnetic sensor applications, MASTInc successfully powers the development and implementation of innovative solutions for healthcare/biomedical, natural resource exploration, government, information technology, manufacturing, and other industries. Visit www.micromeminc.com www.mastinc.com.

About Life Medical Technologies

Life Medical, a developmental stage company, is dedicated to educating and providing life-enhancing, innovative medical products to the public through partnerships with non-profit organizations, corporations, academia, the government, and individuals in an ongoing effort to strive towards a successful outcome in the fight against breast cancer and other life-threatening illnesses. Life Medical is dedicated to providing innovative health care products and education worldwide that empowers individuals to have greater control over their healthcare.

Safe Harbor Statement

This press release contains forward-looking statements. Such forward-looking statements are subject to a number of risks, assumptions and uncertainties that could cause the Company's actual results to differ materially from those projected in such forward-looking statements. In particular, factors that could cause actual results to differ materially from those in forward looking statements include: our inability to obtain additional financing on acceptable terms; risk that our products and services will not gain widespread market acceptance; continued consumer adoption of digital technology; inability to compete with others who provide comparable products; the failure of our technology; the infringement of our technology with proprietary rights of third parties; inability to respond to consumer and technological demands; inability to replace significant customers; seasonal nature of our business; and other risks detailed in our filings with the Securities and Exchange Commission. Forward-looking statements speak only as of the date made and are not guarantees of future performance. We undertake no obligation to publicly update or revise any forward-looking statements. When used in this document, the words "believe," "expect," "anticipate," "estimate," "project," "plan," "should," "intend," "may," "will," "would," "potential," and similar expressions may be used to identify forward-looking statements.

The CNSX or any other securities regulatory authority has not reviewed and does not accept responsibility for the adequacy or accuracy of this press release that has been prepared by management.

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Listing: NASD OTC-Bulletin Board - Symbol: MMTIF
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Shares issued: 88,583,003
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