



**FOR IMMEDIATE RELEASE**

**March 5, 2015**

**American Oil Company awards Micromem second development contract**

**Toronto, New York, March 5, 2015:** Micromem Technologies Inc. (“Micromem”) (“the Company”) (CSE: MRM, OTCQX: MMTIF) through its wholly owned subsidiary Micromem Applied Sensor Technologies Inc. (MAST), is pleased to announce that the Company has been awarded a second Joint Product Development Agreement “JPDA” by the American based Oil company (“Oil Co.”), the agreement is valued at US \$9,200,000. Under the terms of the Agreement the Oil Co. and Micromem will design, build and demonstrate a cement integrity sensor prototype for use in cement pumped down oil well boreholes to depths of 15,000 feet. The sensor will be mixed into the wet cement and form part of the structure. The Company expects to deliver the first prototype by June 2015. Under the agreement, once deployment begins Micromem will also benefit from royalty/license based income.

The sensor will measure temperature, moisture, stress levels and listen for the presence of flow in micro fractures to advise the operator in real time, of the condition of the cement surrounding the casing of an oil well. These sensors will remain useful for monitoring the conditions of the cement over the lifetime of the structure. The clients’ objective will be to deploy these sensors in their oil wells globally. For oil companies to be able to detect and analyze issues well in advance of fractures developing has many advantages to predict and prevent dangerous spills from failing cement. The system will be connected wirelessly throughout the well network and will in essence make oil wells “smart”. This new technology will create a new paradigm when it comes to smart, integrated systems and building a smart infrastructure. The current estimate of the total number of producing oil and gas wells around the globe that could benefit from this technology is 950,000 with more than 530,000 of them located in the United States.

This technology encompasses systems and methods for detecting and/or monitoring the integrity and condition of cement structures including, for example, highways, bridges, buildings, and wellbores using Nano-Electro-Mechanical System (NEMS) based and/or Micro-Electro-Mechanical System (MEMS) based data sensors.

Micromem will maintain the rights for use of this technology in non-oil well applications including but not limited to the construction industry, road, bridge and other applications where cement is being used. The sensors will be mixed into the wet cement and poured into whichever form is required. The sensors will operate by scavenging power from the surrounding area and “pinged” by a wireless communication system as required to report the condition of the cement. The benefits of making cement smart in an industry where safety and quality of construction are paramount makes this technology a giant leap in the direction of smart infrastructure systems. An early warning system that can be connected wirelessly to central stations located anywhere in the world that will alert the operator to developing problems before they become a problem will save the industry time and money and help to protect the environment from dangerous and damaging oil leaks. Plus when being used in structures such as buildings, parking structures and bridges the ability to monitor the integrity of the cement will mean added safety in structures used by the population at large.

This is another example of how Micromem is building the Internet of Things by making infrastructure smart and deploying these technologies with global partners.

Steven Van Fleet says “Avoiding disasters that occurred in the Gulf of Mexico is critical to the environmental sustainability of the planet and the future of oil and gas exploration. Ensuring integrity of the poured well bore is also a big step in mitigating environmental roadblocks to fracking. The embedded sensors, as the cement is pumped into the well, will act as an augmented well cementing engineer, with real-time location awareness. As soon as the cement integrity sensor is in place, you know what information it is going to provide you at the surface. This is knowledge that you normally first have to complete the well and test via antiquated log methods. Our application is about eliminating slack time and worry.”

Joseph Fuda says “Our client has reviewed several proposals to deal with this important problem and selected our technology as the best candidate for success in solving this critical issue. We have built a strong relationship with this client by delivering on our previous project commitments and demonstrating the ability to solve their problems.”

**About Micromem and MASTInc**

MASTInc is a wholly owned U.S.-based subsidiary of Micromem Technologies Inc., a publicly traded (OTC QX: MMTIF, CSE: MRM) company. MASTInc 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.comwww.mastinc.com](http://www.micromeminc.comwww.mastinc.com).

**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 CSE 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.

**Listing:** NASD OTCQX-Bulletin Board - Symbol: MMTIF  
CSE - Symbol: MRM

Shares issued: 191,425,600

SEC File No: 0-26005

**Investor Contact:** info@micromeminc.com; Tel. 416-364-2023

Subscribe to receive News Releases by Email on our website's home page. [www.micromeminc.com](http://www.micromeminc.com)