

FOR IMMEDIATE RELEASE

August 19, 2013

Micromem: Technical Update

Toronto, Ontario & New York, New York--(Newsfile Corp. - August 19, 2013) - Micromem Technologies Inc. (CNSX: MRM) (OTCQB: MMTIF) ("Micromem") through its wholly owned subsidiary Micromem Applied Sensor Technologies Inc. (MAST), announces they continue awaiting approval of the terms of a proposed license agreement to the American automobile company (the "automobile company"). The previously reported approval of the proof of concept by the automobile company marked several important milestones by Micromem.

It marked a turning point on this project from pure research to the development of a product to be mass produced on an industrial scale by a Tier one manufacturing company. Over time this oil plug will be globally distributed and used by millions of automobiles.

The first prototype oil plug device developed by Micromem is shown below:



To view an enhanced version of this image, please visit: http://orders.newsfilecorp.com/files/945/6372_micromemlenhanced.jpg

The main purpose of the oil sensor is to measure the amount of contamination, the level and the temperature in real time and have the information wirelessly transmitted to the automobile's computer to be processed by the software and advise the driver of issues. This is a major advantage over preprogrammed algorithms with standard notice periods to the driver. The primary advantage Micromem's device provides, however, is not just the sensing capabilities but the fact that it operates by scavenging power from the automobile's ambient magnetic field, using that energy to power itself, perform the analysis and transmit the learned data to the automobile's computer. This analysis is done 4 hours after the car is shut down, once all the oil has drained back from the crank case. No one else is offering this capability and it is solely because our design includes power scavenging ability which will allow the sensor to wake up after the car has been shut down and take measurements. Once the car is started back up the device communicates to the automobile's computer and advises of an oil level measurement accurate to within 1mm of oil height. This wireless power advantage alone provides the car company cost savings by eliminating the current process where there is a material, time and labour cost to lay wiring through the current oil pan to the cars electrical system. Under Micromem's current costing estimates the cost of our device is less than the current system being used.

This now proven power scavenging capability has laid the cornerstone for development of new products. In addition to the current contracts with the major oil companies that are utilizing only the sensing capabilities these companies are now negotiating projects that will utilize the power scavenging abilities' of our sensor. One such project currently under review by an oil company contemplates our sensors to be embedded in to the cement as it is poured into the well bore. Using acoustical energy from our detectors the sensors will be powered and they will then listen, detect and store for later communication, the sound of micro fractures in the cement. These micro fractures are the early warning indicators of possible well failures. Micromem's power scavenging, whether magnetic, vibration, thermal or acoustics is key to deploying our sensor platforms into difficult environments where there is no conventional power.

Below is a photograph of Version 11.B of the power scavenging circuit. The final configuration is to be 1/5 of this size.



To view an enhanced version of this image, please visit: http://orders.newsfilecorp.com/files/945/6372_micromem2enhanced1.jpg

Micromem's technology has garnered the interest of Fortune 100 companies for a reason; we have been able to use our patented technologies to offer innovative solutions to companies that have not found solutions elsewhere.

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 bealthcare/biomedical, natural resource exploration, government, information technology, manufacturing, and other industries. Visit www.micromemic.com.www.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. In particular, factors that could cause actual results to differ materially from those in forward-looking statements. In particular, factors that could cause actual results to differ materially from those in forward-looking statements. In particular, factors that could cause actual results to differ materially from those in forward-looking statements. In particular, factors that could cause actual results to differ materially from those in forward-looking statements include: our mability 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 may 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 beeak 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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