



FOR IMMEDIATE RELEASE

November 12, 2014

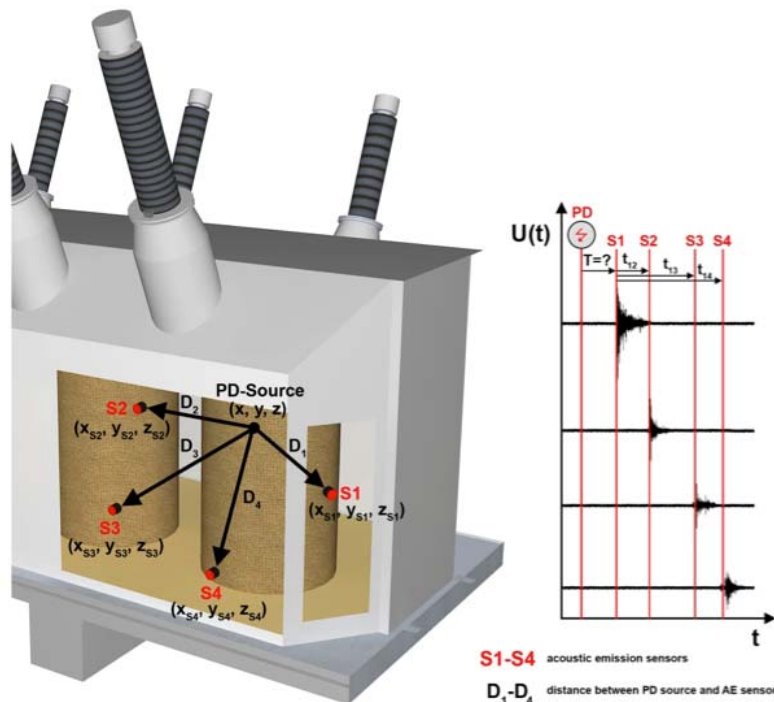
**Micromem Technologies Inc.:**  
**Provides Update on MEMS-based Sensor Solution to Detect Transformer Partial Discharge**

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**Toronto, New York, November 12, 2014:** Micromem Technologies Inc.'s (the "Company") (CSE: MRM, OTCQX: MMTIF) wholly owned subsidiary, Micromem Applied Sensor Technologies Inc. (MAST), announces further to the Joint Development Agreement (JDA) announced December 11, 2013 (<http://www.micromeminc.com/newsroom>) with its American based Utilities Company Client, the Company successfully demonstrated Stage Gate Two of the Transformer Partial Discharge Proof of Concept (POC) and an invoice for \$200,000 USD was issued to the Client as an initial payment towards the Contract. On October 30, 2014, a live demonstration of the POC MEMS-based Sensor Solution to detect transformer partial discharge was successfully demonstrated on the Client's targeted transformer following a client approved protocol. The criteria to measure success were as follows:

- Demonstrate optical array acoustic, real-time detection of partial discharges
- Demonstrate the ability to localize partial discharges
- Demonstrate the ability to assign a severity to the detected partial discharges
- Provide a visualization of partial discharges location
- Provide mobile reporting of alarms and events
- Provide the ability to store a history of time-stamped partial discharges by location and by transformer
- All criteria were demonstrated successfully.

This is the first technology of its kind that is able to measure the nanosecond partial discharge events with sensors installed in the oil of a transformer. Current competitive technology attempts to detect and localize partial discharges with devices installed on the metal housing of the transformer. Our approach is more effective due to the radical difference in the speed of sound in oil and in steel.



MAST patented sensors are located in the critical areas of a transformer, directly in the oil and are designed to detect the partial discharge event, measure the severity of the partial discharge and locate it accurately so as to inform the user of the root cause of the partial discharge and how to direct their maintenance effort.

Furthermore, the architecture provides commercialization pathways (Stage Gate Three) for integrated transformer health monitoring and monitoring of partial discharges in aging transformers.

Both Micromem and this Client are now working through the logistics of an order for this technology for deployment within their network. Further announcements are expected.

Visit Micromem's website to view new Presentation ([www.micromeminc.com](http://www.micromeminc.com)) and MAST's new website that has been updated to reflect current content ([www.mastinc.com](http://www.mastinc.com)).

**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.com](http://www.micromeminc.com) or [www.mastinc.com](http://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 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

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