

Canada-India RFID project looks to improve traffic flow, reduce pollution

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RFID technology may provide the key to better traffic management and improved pollution control in Canada, India and worldwide.

That is the hope of a new research collaboration established by the McMaster RFID Applications Lab (MRAL), the Indian Institute of Technology Delhi (IIT- New Delhi), IPICO Inc. and Strategic Consultants (New Delhi). The \$2.5 million initiative is receiving \$1.2 million in matching funding by International Science and Technology Partnerships Canada (ISTPCanada) and the Global Innovation & Technology Alliance (GITA). The remaining funding is provided by industry partners.

The funding will be used to continue the development of a technology solution to power an intelligent transportation system framework. The goal of the project is to create an economically-viable RFID solution to capture and analyze data related to traffic use and capacity, without a corresponding increase in investment in road infrastructure. In turn, this technology could be used to help manage traffic, reducing road delays and transit time, therefore reducing both emissions and dependency on fossil fuels.

"Pacing traffic to flow more evenly can reduce commuting time, fossil fuel use and harmful exhaust emissions," said Pankaj Sood, manager, MRAL. "Managing existing road capacity more efficiently through intelligent transportation systems is also much more affordable than undertaking large infrastructure projects."

McMaster will supply the expertise in antenna design, wireless communications, networking, systems design and business process re-engineering. This will include working with IPICO to design new RFID tags/readers that will provide the functionality required by this initiative.

Rafael Kleiman, Canada Research Chair in MicroElectroMechanical Systems and professor of engineering physics, and Rafik Loutfy, director of the Xerox Centre for Engineering Entrepreneurship and Innovation and professor of chemical engineering, are the lead participants in this initiative from McMaster.

Source: McMaster University

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