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Media Release

Communiqué

McMaster University Researchers Develop Promising New Automotive Process

For immediate release

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Hamilton, ON: An innovative new process that can machine automotive engine blocks faster, cheaper and greener has been developed by a national team of researchers, led by a McMaster University professor. The new process achieves a 150 per cent improvement in the amount of time required to cut an engine block. On June 17, 2004, Dr. Eu-Gen Ng, a research manager in the department of mechanical engineering at McMaster University will present some of the team's findings at the AUTO21 Scientific Conference in Montreal, Quebec.

"In addition to the time the new procedure saves, it also reduces the amount of coolants normally used by 99 per cent," said Dr. Ng. Instead of using large volumes of lubricants during the cutting process, the new process uses a high-pressure mixture of compressed air and synthetic oil. Only five millilitres of oil are used per hour – an amount much lower than the amount of traditional coolant currently in use and more environmentally friendly.

The research team is funded by the AUTO21 Network, and is led by Dr. Mohamed Elbestawi, dean of engineering at McMaster University. Dr. Elbestawi coordinates the work of researchers from the University of Windsor, the University of Waterloo, Ecole Polytechnique and the University of New Brunswick.

The AUTO21 2004 Scientific Conference will take place June 15-17, 2004 at Le Centre Sheraton in Montreal, Quebec. Dr. Ng's presentation is scheduled for 2:15 p.m. on Thursday, June 17. The annual conference highlights some of the Network's recent research results while providing a networking opportunity for the Network's 600 university and student researchers and additional industry and government representatives. Other conference activities include the final awards ceremony for the DaimlerChrysler Canada Highly Qualified People Poster Competition and an industry speaker series, which includes Ray Tanguay, president of Toyota Motor Manufacturing Canada, Jim Gouin, vice-president and controller, Ford Motor Company, and Michael Kelly, vice-president, Alcan Automotive. Additional conference information can be found on www.auto21.ca in the news and events section.

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The Government of Canada awarded the AUTO21 `Network of Centres of Excellence an initial four-year grant of \$23 million in 2001 to help it enhance Canada's position as a world leader in automotive research and development. Researchers at 35 Canadian universities are working on innovative, auto-related projects in the areas of health, safety and injury prevention; societal issues; materials and manufacturing; design processes; powertrains, fuels and emissions; and intelligent systems and sensors. In addition to the federal grant, AUTO21 is supported by industry, government and institutional contributions of \$11 million.

McMaster University, one of Canada's leading research-intensive universities, has world-renowned faculty and state-of-the-art research facilities. McMaster's culture of innovation fosters a commitment to discovery and learning in teaching, research and scholarship. Based in Hamilton, the University has a student population of more than 20,000 and more than 112,000 alumni in 128 countries around the world.

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