

Seminar Series 2014 - 2015

Southern Ontario Centre for Atmospheric Aerosol Research
University of Toronto

Clean combustion engines

Professor Jim Wallace

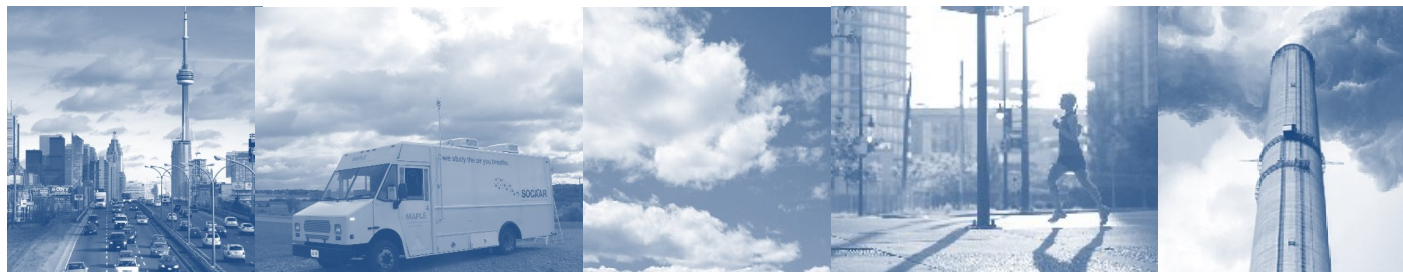
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University of Toronto***



Internal combustion engines provide the motive force for the world's ground transportation system and construction industry and generate essential electric power for off-grid communities and work sites. Yet engines can be a source of both gaseous and particulate matter emissions. This seminar will review the sources of these emissions and present the technologies for controlling them. Engine design continues to evolve, not only because of emissions regulations, but also in response to legislation requiring reduced fuel consumption. These requirements conflict and present a significant challenge to engine designers. The gasoline direct injection (GDI) engine provides an interesting example of a design advance that enables much reduced fuel consumption but at a cost of greater particulate matter emissions. The seminar will highlight the research challenges associated with minimizing GDI particulate matter emissions.

January 7, 2015, 3 – 4 PM

Wallberg Building, 200 College Street, Room 407



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