

Graduate Environmental Research Projects

Southern Ontario Centre for Atmospheric Aerosol Research
University of Toronto

The Southern Ontario Centre for Atmospheric Aerosol Research (SOCAAR) is searching for outstanding graduate students interested in pursuing Masters and PhD research into the impacts of atmospheric aerosol on air quality, human health, and climate. SOCAAR has state-of-the-art facilities and brings together engineers, scientists, and medical professionals.

Possible thesis projects include:

- Inexpensive sensor arrays for measuring air pollutants
- Assessment of the health impacts of air pollutants on lung transplant recipients
- Impacts of aerosol on cloud formation and climate
- Evaluation of air pollution arising from energy mining and processing operations
- Detailed characterization of organic aerosol from vehicles or forest fires
- Laboratory and field investigation of atmospheric oxidation
- Sources of black and organic carbon in the arctic and other remote locations
- Modelling and measurement of traffic related air pollutants near major roadways
- Evaluation of the toxicity of emissions from new vehicle technologies
- Development and application of data mining tools to identify the sources of air pollutants

Ideal candidates will be:

- Concerned about the environment
- Intellectually driven, with a strong sense of curiosity
- Interested in advanced instrumentation for chemical analysis, computational processing and interpreting large databases and fieldwork
- Strong communicators who can work effectively in multidisciplinary teams from engineering, chemistry and medicine in academia and government

Talented individuals with undergraduate degrees in: chemistry, public health, cell biology, environmental science, toxicology, chemical, mechanical, electrical, computer, environmental or biomedical engineering, should email a cover letter, CV and transcript to Prof. Greg Evans (greg.evans@utoronto.ca)

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority. The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from visible minority group members, women, Aboriginal persons, persons with disabilities, members of sexual minority groups, and others who may contribute to the further diversification of ideas.



 **we study the air you breathe**

www.socaar.utoronto.ca