

## Research Associate (Limited Term) - Satellite Instrument Control, Data Analysis and Validation

The Department of Physics at the University of Toronto invites applications for a Research Associate (Limited Term) for a 2-year appointment. The anticipated start date is 15 October, 2018.

### POSITION DESCRIPTION

The Research Associate will work in the group of Prof. James Drummond and will be concerned with the control, data processing and validation of the Measurements Of Pollution In The Troposphere (MOPITT) instrument which was launched on NASA's Terra satellite on 18th December 1999 and is still operational. The University of Toronto is contracted by the Canadian Space Agency (CSA) to provide support services for MOPITT.

The successful candidate will be expected to participate in the MOPITT project as follows:

1. Be responsible for the day-to-day monitoring of the MOPITT instrument, reviewing command loads and interacting with NASA over issues of scheduling and instrument and spacecraft monitoring.
2. Evaluate the short, medium and long-term performance of the instrument through the production of necessary reports, record keeping and analysis. Instrument performance changes should be brought to the attention of Prof. Drummond and others as necessary.
3. Reacting to events, planned and unplanned for both the MOPITT instrument and spacecraft. This may involve meetings, teleconferences, data analysis and other activities on a short timescale. Since events may occur at any time, this may involve efforts outside of normal office hours.
4. Participate with the MOPITT science team at Toronto and the National Center for Atmospheric Research (NCAR) in reviews of science data processing and provide input on instrument performance issues that impact the science data processing.
5. Using MOPITT science data perform analyses and other scientific activities to the performance of the instrument and the validation of the science data.
6. Perform other MOPITT instrument-related activities as directed.

### QUALIFICATIONS

- **Education:** A PhD in atmospheric science or closely related subject.
- **Experience:** Demonstrated multi-year experience in the analysis of satellite data, preferably starting with Level 0 data and extending to at least Level 2. Experience with global atmospheric composition measurements both from satellites and from the ground (or aircraft, balloon, etc) .
- **Skills:** Strong analytic skills, ability to interpret data and identify trends and anomalies; ability to interact effectively with multiple organisations; good reporting (writing) and presentation (oral) skills; ability to work under time pressure; ability to generate research ideas and identify new directions; good time management; ability to work independently with general supervision.
- **Other:** Programming skills in modern scientific computer languages; ability to learn new languages as needed; general knowledge of computer office software.

## APPLICATION PROCEDURE

Applicants should apply online at the link below and include a covering letter, curriculum vitae, and three reference names with their contact addresses and phone numbers by the closing date of September 24, 2018. Any questions regarding the position should be directed to Dr. Drummond at [james.drummond@utoronto.ca](mailto:james.drummond@utoronto.ca).

<https://utoronto.taleo.net/careersection/10000/jobdetail.ftl?job=1803530&tz=GMT-04%3A00>

The University of Toronto is strongly committed to diversity within its community and especially welcomes applications from racialized persons / persons of colour, women, Indigenous / Aboriginal People of North America, persons with disabilities, LGBTQ persons, and others who may contribute to the further diversification of ideas.

All qualified candidates are encouraged to apply; however, Canadians and permanent residents will be given priority.