Environment Canada Environnement Canada

Environment Canada, Cloud Physics and Severe Weather Research Section: **Post-Doctoral Position**

Toronto, Ontario, Canada

Cloud Physics and Severe Weather Research Section of Environment Canada invites two postdoctoral scientists to work on analysis of cloud microphysical analysis and airborne cloud microphysical instrumentation.

One Post-Doctoral Fellowship is available for each of the following projects:

Cloud Microphysical Analysis – Airborne cloud microphysical measurements are used for validation of remote sensing measurements, parameterizations for weather predictions and climate models. This PDF position will involve development and maintenance of the software for synthetic analysis of multiple entries from airborne instruments (e.g. particle scattering and imaging probes, bulk microphysical probes, radars and lidar), intensive analysis of data for parameterization of cloud microphysics for cloud models, and interpretation of obtained results address scientific questions on cloud microstructure formation.

Cloud Microphysical Measurements – Accuracy of airborne cloud microphysical measurements plays a crucial role in developing cloud and climate models and remote sensing validations. This PDF position will involve analysis of the accuracy of airborne cloud microphysical measurements, laboratory and wind tunnel calibrations of cloud particle probes, introducing corrections in the processing software, operation of cloud microphysical instrumentation during field campaigns, performing data collection airborne cloud measurements and their analysis to address scientific questions on cloud microstructure formation.

A Ph.D. in atmospheric sciences, physics or engineering, or a related discipline is required. Demonstrated skills in experimental atmospheric physics are also required. Candidates are expected to have established their ability to conduct original, independent scientific research, as well as familiarity with airborne cloud microphysical instrumentation; laboratory experiments; high performance computing (Matlab) and strong background in data analysis, physics and math are required. They are expected to be able to work well in a team and to communicate the results of their research orally and in writing.

The successful candidate must have the ability to travel to field studies for periods of up to 6 weeks, to work in a team environment and with multiple collaborators. **A demonstrated ability to publish in the peer-reviewed literature is essential.**

Qualified candidates are requested to send their curriculum vitae, including a full list of publications and conference presentations, contact information for 3 references, a one-page cover letter indicating their date of availability and describing how their knowledge and experience are aligned with the position, to Dr. Alexei Korolev by e-mail (Alexei.Korolev@ec.gc.ca).

Successful candidates must be included in the inventory of Canada's Natural Sciences and Engineering Research Council (NSERC) Visiting Fellowships in Canadian Government Laboratories Program. Applications to the inventory can be made through the link below.

http://www.nserc-crsng.gc.ca/Students-Etudiants/PD-NP/Laboratories-Laboratoires/index_eng.asp

Review of complete applications will begin immediately until the position is filled.

To be eligible, the candidate must have obtained a PhD within the past 5 yrs.