

The University of Rochester Ice Core and Atmospheric Chemistry Laboratory has an opening for a scientist or a lab manager. Our research is focused on better understanding past and modern atmospheric composition and chemistry and their relationship with both natural and human-caused climate change. We regularly conduct fieldwork at locations ranging from the gorges of Western New York state to Greenland and Antarctica. To learn more about our research group, please go to <<http://www.sas.rochester.edu/ees/petrenko/index.html>>. The successful candidate will support a range of projects in the Ice Core and Atmospheric Chemistry Lab as well as some projects in the Atmospheric Chemistry & Climate Group <<http://atmos.earth.rochester.edu/>>. This is intended to be a long-term position. The Rochester area is known for its excellent outdoor recreation opportunities, vibrant arts and nightlife scene and relatively low cost of living.

Interested candidates with a PhD or a MS and multiple years of relevant experience should apply for the Scientist-level position. To start the application, go to <<https://www.rochester.edu/faculty-recruiting/applications>>, create a profile and under the available list of departments select Earth and Environmental Sciences and then the Ice Core and Atmospheric Chemistry Lab Scientist position.

Candidates with a BS or an MS with less experience should apply for the lab manager position by going to <https://www.rochester.edu/human-resources/careers/>, scrolling down and Selecting “Search all Jobs”, then entering 244719 in the search field.

Please direct the applications and all questions about the position to Vasilii Petrenko at vasilii.petrenko@rochester.edu. Review of applicants is ongoing and will continue until the position is filled.

The UR Ice Core and Atmospheric Chemistry lab (<http://www.sas.rochester.edu/ees/petrenko/index.html>) has an opening for an undergraduate student researcher.

How does the ability of the global atmosphere to cleanse itself vary in space and time?

Hydroxyl radicals (OH) are arguably the single most important chemical species in the atmosphere, because reactions with OH are the main way that many greenhouse gases (such as methane) and regulated pollutants (such as carbon monoxide) are removed from the atmosphere. Our current scientific understanding of OH is incomplete, with important unanswered questions about how OH concentration varies by latitude, season and between different years. OH radicals are very reactive, with a lifetime of only about 1 second; this makes direct OH measurements very difficult. The student selected for this position would work on a new project that is investigating OH variability by using carbon-14-containing carbon monoxide (^{14}CO) as a tracer. ^{14}CO is produced naturally in the upper atmosphere by cosmic rays, and removed almost entirely by reaction with OH. This position would involve learning and then using several laboratory analytical techniques for processing and measurements of air samples that are being collected for this project by atmospheric observatories around the world. The desired start date would be around late July 2023, although there is some flexibility in this. We are seeking a student researcher who would be interested in being involved with this research project for the next two academic years. This is a paid position.

You must have strong communication skills, be a fast learner, be hard-working and reliable, and have excellent attention to detail. Other experience / skills that would be useful but are not required: EESC 218, prior work with analytical instrumentation.

To apply:

Please send your expression of interest along with a transcript (unofficial is fine) and a resume to Prof. Vasilii Petrenko at vpetrenk@ur.rochester.edu. Review of applications will begin on April 21 and will continue until the position is filled.