Research Scientist– Position Description

POSITION DESCRIPTION

Research Scientist
This position is based in Boulder, Colorado in the National Oceanic and Atmospheric Administration / Earth System Research Laboratory / Global Monitoring Division / Carbon Cycle Greenhouse Gases Group (NOAA/ESRL/GMD/CCGG)

The Position
The Cooperative Institute for Research in Environmental Sciences (CIRES) is seeking a Research Scientist and/or Postdoctoral Research Scientist (depending on experience) to support the NOAA/ESRL/GMD/CCGG Aircraft Program. This program, is part of the larger Global Greenhouse Gas Reference Network, which is an international effort to measure greenhouse gases that includes regular, discrete samples from the NOAA/ESRL/GMD baseline observatories, cooperative fixed sites, and commercial ships. The CCGG Aircraft Program’s current focus is on understanding the North American continent’s carbon budget and identifying and understanding carbon sources and sinks on regional and continental scales.

Duties may include:

• Support the ongoing acquisition and quality control of in-situ and flask measurements from a network of airborne platforms in North America.
• Improve techniques, procedures, and instrumentation used in the network, in particular with in-situ measurements of the atmospheric CO₂, CH₄, CO and possibly other species.
• Implement field campaigns on behalf of CCGG Aircraft Program within the framework of the North American Carbon Program.
• Interpret the airborne atmospheric data over North America and the surrounding marine regions to improve understanding of the North American carbon budget and the carbon cycle on regional to global scales.
• Lead CCGG Aircraft Program’s effort to development of new instrumentation and measurement techniques for use on regularly-scheduled commercial aircraft or development of balloon borne high-altitude sampling system know as the “AirCore”.
• Publish papers in peer-reviewed journals and present results at scientific conferences.

Preferred Qualifications:

• PhD in atmospheric physics or chemistry, oceanography, or a related physical science or engineering discipline
• Demonstrated experience making high-accuracy measurements of trace gases
• Basic understanding of atmospheric dynamics, particularly boundary layer processes
• Experience with scientific programming
• Demonstrated ability to analyze and interpret atmospheric observational data
• Demonstrated ability to communicate results in a clear fashion to the scientific community via peer-reviewed publications and presentations at scientific meetings
• Willing and able to fly on research aircraft
• Demonstrated ability to work in a collaborative environment

To apply, send a CV and cover letter to esrl.gmd.jobs@noaa.gov for consideration. Review of applications will begin February 29 and continue until the position(s) are filled.