

Post-Doctoral Position on Chemical Transport Modeling of Arctic Air Pollution

The LATMOS (<u>http://www.latmos.ipsl.fr</u>) laboratory, located at the University Pierre and Marie Curie in the center of Paris (Jussieu campus), invites applications for a postdoctoral researcher funded by the European Union to start in fall 2013.

The postdoctoral researcher will work as part of the European Union funded ACCESS (Arctic Climate Change, Economy and Society, <u>http://www.access-eu.org</u>) project, with a focus on understanding Arctic atmospheric composition and anthropogenic impacts in the region. The overarching goals of ACCESS are to evaluate climate impacts in the Arctic on marine transportation, fisheries, marine mammals, and the extraction of hydrocarbons over the next 20 years, with particular attention on environmental sensitivities and sustainability. Work at LATMOS focuses on quantification of the impact of local emissions (shipping, resource extraction) and transport of remote mid-latitude pollution on present-day and future air composition in the Arctic. The LATMOS team participated in an aircraft campaign (conducted in cooperation with the German Aerospace Center (DLR) in summer 2012) to study local Arctic emissions and plume dispersion from shipping and oil/gas extraction activities. The post-doctoral researcher will use a chemical-aerosol transport model (WRF-Chem), run at regional to hemispheric scales, to analyze campaign data and examine the impact of anthropogenic emissions on ozone and aerosols in the Arctic.

The position is open for 12 months initially with the possibility of an extension until the end of the ACCESS project and/or as part of a recently accepted EU project, ICE-ARC (Ice, Climate and Economics in the Arctic). ICE-ARC aims to improve our understanding about the disappearance of summer Arctic sea-ice and its climate, economic and social impacts. The LATMOS contribution includes data analysis and modeling of new aerosol observations that will be collected in the Arctic Ocean as well as the study of feedbacks involving atmospheric composition-radiation-clouds.

Qualifications and requirements for the position:

- PhD in atmospheric sciences, atmospheric chemistry, or a similar field
- Experience in atmospheric chemistry modeling / analysis of atmospheric observations / pollutant emissions
- Programming skills in Unix/Linux, Fortran, and scientific visualization programs (Matlab, IDL, and/or NCL)
- Good English language and writing skills
- Willingness to work in an international framework, and to attend project/international meetings

Review of the applications will start immediately and will continue until the position is filled. To apply, please send a detailed CV (including a list of publications), a letter of motivation in English, and the email addresses of two academic referees to Kathy Law: <u>kathy.law@latmos.ipsl.fr</u> and Claire Granier: <u>claire.granier@latmos.ipsl.fr</u>