Empa is the interdisciplinary research and services institution for material sciences and technology development of the ETH Domain.

The Laboratory for Air Pollution & Environmental Technology has an opening for a postdoctoral research fellow for advancing atmospheric trace gas measurements, such as volatile organic compounds (VOCs), nitrogen oxides (NOx) and Non-CO2 greenhouse gases. We offer a

Postdoc Position Analysis of atmospheric trace gases /Atmospheric Science

The Postdoc position is focused on advancing measurements of volatile organic compounds (VOCs), nitrogen oxides (NOx) and Non-CO2 greenhouse gases (halocarbons, methane, nitrous oxide) in the atmosphere. These activities are embedded in two European (FP7) infrastructure projects (ACTRIS and InGOS), aiming at progressing measurement techniques for these atmospheric trace gases in Europe.

The practical work related to the VOC and NOx measurements consists in an interesting mixture between organisation and scientific interpretation of European round-robin exercises and side-by-side intercomparisons. The focus for the Non-CO2 greenhouse gas measurements is on improving existing measurement methods, especially for the halocarbons (gas chromatograph-mass spectrometer), with the aim detecting new, yet unidentified compounds in the atmosphere. This will eventually allow measurements to be used as an early-warning tool for new halogenated greenhouse gases.

Furthermore, the Postdoc study is also connected to the continuous measurements of Non-CO2 greenhouse gases at the high-Alpine site of Jungfraujoch (3580 m asl), which is a part of the world-wide AGAGE measurement network. Measurement methods used are mostly based on gas chromatography (GC-MS/FID/ECD) but also comprise newer approaches such as laser-based methods. For more information also visit our website: www.empa.ch/climate_gases

For this 3-year position we are looking for a highly motivated candidate with a PhD degree in Chemistry, Physics, Environmental/Earth sciences or Meteorology. The Post-doc position will require both a sound knowledge of analytical chemistry (preferably of atmospheric trace gases) and negotiating skills during discussions with European key players in the field of air pollution monitoring and Non-CO2 greenhouse gas measurements.

For further information please contact Dr. Stefan Reimann, phone +41 58 765 46 38, e-mail: <u>stefan.reimann@empa.ch</u>

Applications should be accompanied by a CV, a list of publications a letter of motivation and addresses of two referees.

Please submit your application online at: http://internet1.refline.ch/673276/0240/++publications++/1/index.html

and upload all documents through this webpage. Any other way of applying will not be considered.