Two positions King's College London (1): RA (2) PhD studentship

(1) Research Assistant/Associate in

Observing and Modelling Urban Surface - Atmosphere Exchanges

Fixed term contact - 18-21 months

Geography Department

King's College London

The post holder will participate in two research projects that involve observations in London (including: eddy covariance, scinitillometry, ceilometer techniques). There will be an opportunity to develop (and/or participate) in research associated with the wide spectrum of activities that are occurring in relation to these projects and the post holders interests. The scope of activities currently occurring can be seen <<u>http://geography.kcl.ac.uk/micromet/index.htm></u>

We are looking for someone who is experienced with instrumentation setup and operations; highly numerate with science or engineering research experience and programming ability (Fortran, MatLab and/or R). Excellent English (written and spoken) is essential. Experience in one or more of: measuring land-surface atmospheric exchanges, modelling land-surface atmospheric exchanges, atmospheric science, urban climatology, and/or hydrology will be advantageous.

The appointment will be made at the Grade 5-6 scale, \pounds 27,946 - \pounds 33,917 per annum inclusive of London Allowance, depending on qualifications and experience.

For informal enquires please contact Prof. Sue Grimmond on <u>Sue.Grimmond@kcl.ac.uk<mailto:Sue.Grimmond@kcl.ac.uk></u> or W: <u>http://www.kcl.ac.uk/ip/suegrimmond/index.htm</u>).

Further details and application packs are available on the College's website at <u>www.kcl.ac.uk/jobs<http://www.kcl.ac.uk/jobs></u>, or alternatively by emailing Human Resources at

<u>cass-recruitment@kcl.ac.uk<mailto:cass-recruitment@kcl.ac.uk></u>. Please quote reference number G5/DAR/270/09 in all correspondence.

The closing date for receipt of applications is 4 January 2010

Equality of opportunity is College policy.

(2) PhD student Position

PhD position available starting early 2010 to be part of the project 'ClearFLo'. The student, to be based at *King's College London,* will focus on the meteorological dimension of the project. The NERC funded ClearFlo project is concerned with the relations between air quality, human health and meteorology in urban areas. ClearfLo aims to provide integrated measurements of the meteorology, composition and particulate loading of London's urban atmosphere, made at street level and at elevated sites, implemented by modeling, to improve predictive capability for air quality. New measurement capabilities in London will be established, including longterm measurements and intensive observation periods. Analysis and modeling of the measurements will be used to establish key processes.

The PhD student research will focus on the micrometeorology and boundary layer meteorology of London. A wide range of new instruments will be installed at sites in and near London including: eddy covariance towers, large aperture scintillometry, and ceilometers. The student will develop their own research thesis within the scope of the larger project; possibilities include the influence of surface characteristics and flux partitioning on boundary layer development.

The student will join a dynamic, international group of PhD students and post-docs working on urban atmosphere research at King's College London < http://www.kcl.ac.uk/schools/sspp/geography/people/acad/grimmond/;

<<u>http://geography.kcl.ac.uk/micromet/index.htm</u>

> as well as having close collaboration with colleagues at the University of Reading and a number of other UK universities and research institutes involved in the ClearFLo project.

Student: Strong interest in measurement, data analysis, micrometeorology and/or boundary layer meteorology with experience in one or more of these

aspects, and keen to learn about the other areas. Background in meteorology, physics, engineering, physical geography or other relevant areas will be considered. A strong undergraduate and master's degree are essential.

Requirements: student must be eligible for NERC funding (i.e. a UK citizen or resident in the UK for longer than 3 years while not participating in education). Please check the NERC website if you are uncertain about your eligibility.

Application: Please send an email with the following: CV, statement demonstrating appropriate skills and interest (1 page), example of previous research (e.g. Master's thesis, published papers), names of two referees. Indicate when you would be available to start a PhD. Please

email: *Prof Sue Grimmond (sue.grimmond@kcl.ac.uk<mailto:sue.grimmond@kcl.ac.uk>

<mailto:sue.grimmond@kcl.ac.uk>)*

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Applications will be accepted until the position has been filled.

For EU/UK citizens: additional opportunities exist on a project concerned with urban energy, water and carbon exchanges (please follow the application instructions above but clearly indicate that this is for position 2).

*Note for non UK citizens *(and UK citizens), there are additional PhD opportunities. KCL funding deadline is 1 February 2010 (note you will need to complete an online PhD application

http://www.kcl.ac.uk/schools/sspp/geography/phd/apply.html and funding application http://www.kcl.ac.uk/graduate/funding/funding1011.

Professor Sue Grimmond

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