



UNIVERSITY OF LEEDS

**Faculty of Environment
School of Earth and Environment
Institute for Atmospheric Science**

**Instrument Research Scientist: Atmospheric Science
(Full-time)**

Available immediately for a fixed term of 3 years. You will be a highly motivated individual with a strong background in the physical sciences to work with its observational groups in Atmospheric Science, as an Instrument Research Scientist (IRS).

You will contribute actively to the research of these groups through the development of new innovative instrumentation, and through maintenance and upgrade of existing equipment. A significant part of the work will involve participation in field deployments which can extend for periods of weeks, this may also include the taught fieldcourses. It is expected you will have and be able to develop an appreciation of the underlying science principles on which the instrumentation is founded and the objectives of the science programmes making use of these facilities. You will be fully involved in the publication of scientific results and the preparation of funding proposals. You will be expected to cost and outsource maintenance and fabrication to the School's instrument services division, extensive workshop facilities or external sources where appropriate.

You will have experience with Windows and Linux operating systems along with practical programming experience in at least one of the following languages: C/C++/Delphi/Pascal/Kylix with a willingness to learn others. With a PhD in physical science or engineering, you will have good interpersonal and communication skills, including written and a full, current, valid driving licence is required for accessing difficult terrain with kit and equipment to field trip destinations.

University Grade 7 (£27,466 – £32,796 p.a.)

Further details concerning the School, its research activities and structure are available at <http://www.see.leeds.ac.uk>

Informal enquiries may be made to Dr Jim McQuaid, email j.mcquaid@see.leeds.ac.uk, tel +44 (0)113 343 6724.

To apply online please visit <http://www.leeds.ac.uk> and click on 'jobs'. Alternatively Application forms and further particulars may also be obtained from Mrs P Shepherd, School of Earth and Environment: E C Stoner Building, The University of Leeds, Leeds LS2 9JT, UK, email p.shepherd@see.leeds.ac.uk, tel +44 (0)113 343 5201, fax +44 (0)113 343 5259.

Job ref 315087 Closing date 12 October 2007

Further Particulars

The School is one of the largest research centres of its kind in Europe, with internationally recognised research programmes in Atmospheric Science (IAS), in which you will be based, Geophysics, Geochemistry, Earth Surface Processes and Environmental Management. There may be opportunities to collaborate with the other Institutes within the School in future.

The school was recently formed from the merger of the Schools of Environment and Earth Sciences, both of which obtained grade 5 ratings for their research in the 2001 Research Assessment Exercise.

IAS has an established and growing research programme in atmospheric observations, associated with research teams in dynamical meteorology, aerosol science, cloud physics and atmospheric chemistry. The Institute is also a key part of the Universities Facilities for Atmospheric Measurement (UFAM) – a national collaboration of the UK university departments in experimental and observational atmospheric science. In addition, the Institute collaborates in strong and established research programmes with the School of Chemistry, Institute for Transport Studies and Department of Fuel and Energy. Within the teaching activities of the Institute we run a number of undergraduate fieldcourses which are designed to introduce our undergraduate and taught masters students to a wide range of fundamental measurement techniques used in atmospheric science not in a classroom but in a field environment using the equipment that we use for research projects.

Main Responsibilities of the Post

To provide high end technical research support for atmospheric measurement programmes. Specifically, you will be expected to perform the following duties:

- Instrument design and prototyping for research groups in dynamical meteorology, aerosol science, cloud physics and atmospheric chemistry.
- Commissioning of instrument fabrication and maintenance as required.
- Management of the existing pool of instruments, including maintenance and liaison with users within the Institute and external.
- Software development for instrument control, data acquisition and analysis.
- Involvement in field programmes, from the experimental concept stage through logistical deployment and operations, to the provision of data.
- Operation of institute instrumentation on board research aircraft during field deployments.
- Calibration of equipment including data quality control (QA/QC).
- Scientific input into data analysis and interpretation.
- Maintain awareness of evolving technologies in the relevant science areas.
- Participate in IAS teaching fieldcourses, this will also involve some preparation.

The individual will work closely with research groups, learning where necessary the practical and scientific skills to support the research of the groups. The post holder will be expected to participate in the preparation of funding proposals and publications. As a consequence the post holder will participate as a Co-Investigator in externally-funded

research projects, and have co-authorship on research papers. It would be an expectation that the candidate would lead instrument development papers.

Career Expectations

The University of Leeds is committed to developing its staff. All staff participate in the Staff Review and Development scheme and we continue to work with individuals supporting them to maximise their potential.

Progression to a higher grade is dependent on an individual taking on an increased level of responsibility. The scope for this job may grow over time, allowing possible progression should the post holder demonstrate the skills and a wish to develop and increase their responsibilities.

Person specification

Essential

- Ability to manage research instrument development projects, from design stage through to scientific deployment and assistance in data analysis.
- Practical experience with instrument control systems.
- Practical experience of basic construction and light engineering, including soldering and basic fabrication.
- PhD in physical science or engineering
- Experience with Windows and Linux operating systems.
- Practical programming experience in at least one of the following languages: C/C++/Delphi/Pascal/Kylix with a willingness to learn others.
- Ability to work on multiple projects; managing your own time and using initiative.
- Self motivation with a willingness to acquire new skills.
- Willingness and ability to work as part of a team, notably in field programmes.
- Willingness to work in the field, both in the UK and overseas, for extended periods.
- Commitment to own training and personal development
- Evidence of awareness of current developments in your field.
- Good interpersonal and communication skills, including written.
- You need to have a suitable level of personal fitness to enable you to participate in field programmes in challenging environments and difficult terrain.
- A full, current, valid driving licence is required for accessing difficult terrain with kit and equipment to field trip destinations.

Desirable

- Atmospheric science experience.
- Numerical data analysis and statistical skills.

How to Apply

Completed applications should be returned to Mrs P Shepherd, School of Earth and Environment: E C Stoner Building, The University of Leeds, Leeds, LS2 9JT, UK, email p.shepherd@see.leeds.ac.uk, quoting job ref 315087 not later than 12 October 2007.

Applications should include the following:

- **A completed application form.** If you wish to download an application form please visit <http://www.leeds.ac.uk/hr/policy/forms.htm>
- **A Curriculum Vitae/information** requested on page 2 of the form.
- **Equal Opportunities Monitoring form** (*Enclosed*). Please return the Form in a **separate envelope** (enclosed) marked 'EOs Monitoring'. If you wish to complete the Equal Opportunities monitoring form on line please visit:
<http://tdynamic.leeds.ac.uk/equalopps/>

Replies will be treated in complete confidence.

If you are selected for interview you can expect to hear from the University **not later than 4 weeks** after the closing date. If you are not selected for interview the University will not contact you again.

Please note that if you are appointed to this post you must be able to supply proof of the right to work in the UK. If you do not have the right to work in the UK the University will apply to the Border and Immigration Agency (formerly known as the Home Office) to obtain a Work Permit for you. We are obliged by European law to appoint people who are citizens of the European Economic Area (EEA) where possible. A Work Permit will therefore only usually be granted by the Border and Immigration Agency where there is a skills shortage for a particular post.

A Criminal Records Disclosure is not required for this position however applicants who have **unspent** convictions must indicate this in section 9 of the application form and must declare the nature of the conviction to the Recruitment and Administrative Co-ordinator.

Disabled Applicants

The post is located in the Environment Building. Disabled applicants wishing to review access to the building are invited to contact the department direct. Additional information may be sought from Disability Services, e-mail disability@leeds.ac.uk or tel + 44 (0)113 343 3927.

Disabled applicants are not obliged to inform employers of their disability but will still be covered by the Disability Discrimination Act once their disability becomes known.

Data Protection

The information you provide in your application will be used to consider your suitability for the post for which you have applied. If your application is not successful the information will be disposed of confidentially after 6 months. If your application is successful and you

are appointed, your information and future data will be processed in accordance with the University's Data Protection Code of Practice. A copy of this code can be obtained from either the University's Human Resources Department or by visiting:

<http://www.leeds.ac.uk/hr/policy/index.htm>

Health and Safety Responsibilities

You are required to adhere to and comply with the provisions of the Health and Safety at Work Act, related Regulations, and act in accordance with the University's Policy on Health and Safety which can be accessed via:

http://www.leeds.ac.uk/safety/ul_only/usp/uspindex.htm.

In addition you are also required to co-operate with regard to the implementation of the Health and Safety arrangements and should not interfere with or misuse anything provided in the interest of Health, Safety and Welfare at Work.

For more information on the University and terms and conditions of appointments please visit <http://www.leeds.ac.uk>

Equality and Diversity Statement

The University of Leeds is proud to be a multi-cultural community. We value diversity, and are determined to ensure:

- that we treat all individuals fairly, with dignity and respect;
- that the opportunities we provide are open to all;
- that we provide a safe, supportive and welcoming environment – for staff, for students and for visitors.

We recognise that we still have work to do to secure a truly inclusive community, and we are committed to a wide-ranging plan of action to tackle discrimination and to promote diversity.

The Equality and Diversity Statement forms part of the University's Equality and Diversity Policy, which applies to staff and students alike and is available on the University's website at: <http://www.equality.leeds.ac.uk/ed/policy/>

The University has published the following policy and code of practice which are linked to the Equality and Diversity policy. They are also available on the University's website:

- The Race Equality Policy,
- The Code of Practice on Harassment and Bullying

Further policies are being developed, and will be made available on the University's website in due course.

Further information and advice are available from The Equality Service, Telephone: +44 (0)113 343 3927 or by email to equality@leeds.ac.uk.

The University of Leeds

With a proud tradition and an ambitious future vision the University of Leeds offers an exciting environment for all staff. We want to build on over a century of achievement and we now have a new ambition to be in the top 50 universities in the world by 2015. Our staff will be crucial in achieving this vision and we are looking for more talented people to play a part in our future.

Established as an independent institution in 1904 we are now one of the largest universities in the UK with an outstanding reputation for our research and teaching.

Leeds is a member of the Russell Group of UK research-led universities and is a founder member of the World Universities Network (WUN), a global alliance of major international institutions gathered from the UK, North America and Asia. These networks give our staff and students further support for international collaboration. Our wide range of research areas – from medicine to performing arts – creates a tremendous base for collaboration between colleagues.

Around 12% of our 32,000 students are international and come from over 100 countries. We are consistently one of the UK's most popular institutions for undergraduates. They choose Leeds for the quality of our courses and student experience. Our students are challenged by learning and teaching which is informed by our research. We are building stronger relationships with our graduates, and they are increasingly playing a role in campus life.

With around 7,500 staff the University is one of the largest employers in Leeds and one of the most diverse with staff of around 100 nationalities. We offer a range of benefits as an employer and we are continuing to invest in services and facilities for staff. These include a new staff centre and plans for a new swimming pool and fitness complex which join existing facilities like the nursery and sports centre.

Our 98 acre campus is minutes away from the centre of one the UK's biggest cities.

The City of Leeds

Leeds is the fastest growing city in the UK and home to over three-quarters of a million people. It is located in the heart of the UK and is the regional capital of Yorkshire and the Humber.

It is unrivalled in the north of England as a major shopping destination and centre for the arts, entertainment, nightlife and leisure. The city has a rich cultural heritage with a wide range of theatres, cinemas, museums and art galleries and a thriving music scene to cater for all tastes. Leeds has a proud sporting tradition and there are plenty of opportunities to participate in everything at all levels.

Home to some of the UK's and Europe's leading companies, Leeds has seen the fastest rate of growth in terms of job creation in the UK over the last two decades. It is the main centre for the regional headquarters of government departments and utilities providers and the National Health Service. It is also recognised as a major centre for financial services and is the top legal and media centre in the UK outside London.

Leeds has excellent communication and transport links. The city is well served by affordable, frequent local transport and has extensive coach and rail services connecting Leeds with the rest of the UK. Leeds/Bradford airport provides regular flights to an increasing number of destinations.

Large areas of parkland make Leeds a very green city. There are many areas of natural beauty and interest in Leeds from the national attractions of the Royal Armouries and the Thackray National Medical Museum to the fine mansions of Harewood House, Temple Newsam and Lotherton Hall. Leeds is also within easy reach of the Yorkshire Dales, the Peak District, the Lake District and historic towns such as York, Harrogate, Ripon and Bradford.

Rich in history, with a diverse economy, thriving cultural scene and a cosmopolitan atmosphere, Leeds stands proud as a city of regional, national and international importance.

Removal Expenses

The University will contribute to removal expenses incurred by new members of Academic and Academic-Related (Professional and Managerial) staff who:

- accept a position for two years duration or more, which is University funded,
- accept a position that has been advertised nationally (this includes the University website and jobs.ac.uk),
- at the time of appointment (i.e. date of letter of appointment) live outside a radius of 25 miles from Leeds (LS2) and who move to within such a distance to take up the post.

Appointees based at the Bretton Campus must, in order to qualify, live outside a radius of 25 miles from West Bretton (WF4) at the time of appointment and should move to within such a distance to take up the post.

Claims may not cover conveyancing or estate agent's fees or other costs involved in the relocation. Members of staff seeking such assistance should contact the Recruitment Service for the details of approved contractors and a copy of the University Removals Policy.

Key Principles

For qualifying staff the University will reimburse the cost of moving **household effects only** (by surface freight), the cost of storage (up to a maximum period of six months) and insurance costs (while effects are in transit or storage). The costs must be reasonable and up to a maximum of £5,000.

Staff joining the University from overseas on a University funded position, may receive full reimbursement of economy class fares for all members of their immediate family i.e. spouse/partner and children, together with reasonable costs for removing household effects by surface freight. Receipted invoices or other appropriate documentation should accompany all claims for removal expenses.

Expenses are normally paid only in respect of an initial appointment and must normally be claimed within 12 months of taking up the appointment.

The University is entitled to recover removal expenses for all staff who, at their own volition, terminate their employment with the University within the first 2 years of their contract. The University will not however seek to recover such expenses from staff granted an *ex gratia* payment on a discretionary basis i.e. staff on University-funded appointments of two years or less or staff on outside-funded appointments.

University of Leeds Salary Spine and Grading Structure (Aug 07)

60			66,665
59			64,723
58			62,838
57		10b	61,008
56			59,231
55			57,507
54		10a	55,832
53			54,206
52			52,627
51			51,095
50			49,607
49	9		48,161
48			46,759
47			45,397
46			44,074
45			42,791
44			41,545
43		8	40,335
42			39,159
41			38,019
40			36,911
39			35,837
38			34,813
37			33,779
36			32,796
35	7		31,840
34			30,913
33			30,012
32			29,139
31			28,289
30			27,466
29		6	26,666
28			25,889
27			25,134
26			24,403
25			23,692
24			23,002
23			22,332
22			21,682
21	5		21,050
20			20,458
19			19,841
18			19,264
17			18,702
16			18,165
15		4	17,651
14			17,152
13			16,669
12			16,199
11			15,743
10	3		15,300
9			14,869
8			14,462
7			14,069
6			13,739
5		2	13,368
4			13,008
3			12,710
2			12,371
1			12,041