



Job Description and Selection Criteria

Post	Professorship of Geophysics
Department/Faculty	Earth Sciences
Division	Mathematical, Physical and Life Sciences
College	St Cross

Overview of the post

The University intends to appoint a Professor of Geophysics with effect from October 2012 or as soon as possible thereafter. This is a newly established post in the Department of Earth Sciences and its purpose is to maintain and strengthen research and teaching in geophysics and to provide ongoing academic leadership in this core discipline. Geophysics is currently benefiting from a great expansion in global and regional data sets and from the advancement of computational modelling techniques. The department enjoys an internationally leading position in the field through research groups in seismology, geodesy, earthquake studies, marine geophysics and numerical modelling of earth processes. While applications in these areas are welcome, applications in all areas of geophysics, broadly defined, are encouraged.

The Professorship is associated with St Cross College.

Queries about the post should be addressed to Professor John Woodhouse (Head of Department) at john.woodhouse@earth.ox.ac.uk or telephone: +44 (0) 1865 272021.

All enquiries will be treated in strict confidence; they will not form part of the selection decision.

The University of Oxford is a member of the Athena SWAN Charter to promote women in Science, Engineering, Technology and Medicine. The University holds an Athena SWAN bronze award at institutional level. Contact equality@admin.ox.ac.uk for further information about Athena SWAN at the University of Oxford.

Duties of the post

The Professor of Geophysics will be a member of both the University and the College community. He or she will be part of a lively and intellectually stimulating research community which performs to the highest international levels in research and publications and will have access to the excellent research facilities which Oxford offers. He or she will have a role to play in the running of the College as a member and trustee of its Governing Body.

The main duties of the post are as follows:

- Research and the general supervision and leadership of research in geophysics and more generally in the Department of Earth Sciences.
- Teaching, including lectures, classes, laboratory demonstration, supervision of undergraduate and masters' projects, and supervision of doctoral students.
- University examining, as and when requested to do so by a committee for the nomination of examiners.
- Administration, including participation and chairing of relevant committees in the Department and in the wider University, and undertaking relevant administrative roles.
- Headship of Department: every professor who is employed by the University may be invited by the Divisional Board to act as Head of Department and, unless individually exempted, has the formal obligation to accept the headship. The present Head of Department is Professor John Woodhouse, who is scheduled to hold this position until 31 December 2015.

Person specification

Applications will be judged only against the criteria which are set out below. Applicants should make sure that their application shows very clearly how they believe that their skills and experience meet these criteria.

Oxford is committed to fairness, consistency and transparency in selection decisions, and unsuccessful applicants may request feedback against the published selection criteria for the specific post. (We are, however, unable to provide general advice about the suitability of applicants' CVs for future vacancies in Oxford or elsewhere.) Chairs of selection committees (known as electoral boards) will be aware of the principles of equality of opportunity and fair selection and there will be a member of each gender wherever possible.

The successful candidate will demonstrate the following.

REQUIREMENTS	ESSENTIAL or DESIRABLE	ASSESSED BY:
<i>Substantial international reputation in scholarship and research, and excellent publication record in international journals, in the field of geophysics.</i>	<i>Essential</i>	<i>application, interview</i>
<i>Strong record in obtaining research funding and clear plans for future research projects and funding.</i>	<i>Essential</i>	<i>application, interview</i>
<i>The vision, leadership and ability to manage a substantial research team, to train, guide and motivate research students and junior colleagues.</i>	<i>Essential</i>	<i>application, interview</i>
<i>The ability to contribute effectively to ensuring the long-term development of the subject, and to maintaining interest in the subject in Oxford and its wide recognition outside.</i>	<i>Essential</i>	<i>presentation, interview</i>

<i>Commitment to providing effective teaching at undergraduate and postgraduate level.</i>	<i>Essential</i>	<i>presentation, interview</i>
<i>The ability to communicate effectively (written and orally).</i>	<i>Essential</i>	<i>application, presentation, interview</i>
<i>The ability and readiness to contribute to the development and management of the Department of Earth Sciences and the wider University.</i>	<i>Essential</i>	<i>presentation, interview</i>

How to apply

There is no application form. Applications must include:

- your full contact details including email and full postal addresses, and a telephone number
- a covering letter or statement explaining how you meet the criteria set out above
- a full CV and publications list
- an indication of where you first heard about this post
- the names and contact details (postal and e-mail addresses and telephone number) of precisely **three** referees.

You should contact all three of your referees before applying, to ensure they are aware of your application and of the requirements for the post, and to ensure that they would be content to write a reference for you for this post, if they were asked to do so.

The University will assume that it is free to approach your referees at any stage unless your application specifies otherwise. Therefore if you would prefer a referee or referees to be approached only with your specific permission or if you would prefer them to be approached only if you are being called for interview on the final short list, then you must state this in your application, alongside the details of the relevant referee(s). You should provide the names and full contact details of three referees even if you do not wish them to be contacted yet.

If you are shortlisted but only Oxford references are available for you, you will be asked at a later stage to provide the name of an additional referee outside Oxford.

Applications should be sent by email to Dr Gwen Booth, Personnel Officer, Senior Appointments at professorships@admin.ox.ac.uk.

The deadline for applications is **Monday 12 December 2011**.

Should you have any queries about how to apply, please contact Mrs Elaine Eastgate at professorships@admin.ox.ac.uk or telephone: +44 (0) 1865 280189.

The full membership of the board of electors will be published in the University Gazette (<http://www.ox.ac.uk/gazette/>) when it is finalised. All applications will be acknowledged after receipt and will be considered by the board of electors as soon as possible after the closing date. The board is free to search for other candidates at this or any subsequent stage in its

proceedings. All shortlisted candidates will be interviewed and will be asked to give a short presentation to the electors as part of the interview. The board's decision will be communicated as soon as possible after the interview but in some cases there may be a delay while deliberations are ongoing.

Essential Information for Applicants for the Professorship of Geophysics

The University

The University of Oxford aims to sustain excellence in every area of its teaching and research, and to maintain and develop its position as a leader amongst world-class universities. Placing an equally high value on research and on teaching, the colleges, departments and faculties of Oxford aspire both to lead the international research agenda and to offer a unique and exceptional education to our undergraduate and graduate students.

Oxford's self-governing community of scholars includes university professors, readers, and lecturers, college tutors, senior and junior research fellows and over 2,500 other university research staff. The University aims to provide facilities and support for colleagues to pursue innovative research and outstanding teaching, by responding to developments in the intellectual environment and society at large, and by forging close links with the wider academic world, the professions, industry and commerce. The Strategic Plan, detailing strategy for the period 2008-12, can be found at <http://www.admin.ox.ac.uk/prs/planningcycle/stratplan.shtml>.

Research at Oxford combines disciplinary depth with an increasing focus on inter-disciplinary and multi-disciplinary activities addressing a rich and diverse range of issues, from deciphering ancient texts and inscriptions using modern scientific and computational methods developed in Oxford, through to global health, climate change, ageing, energy and the effects on our world of rapid technological change.

Oxford seeks to admit undergraduate students with the intellectual potential to benefit fully from the college tutorial system and small group learning to which Oxford is deeply committed. Meeting in small groups with their tutor, undergraduates are exposed to rigorous scholarly challenge and learn to develop their critical thinking, their ability to articulate their views with clarity, and their personal and intellectual confidence. They receive a high level of personal attention from leading academics.

Oxford has a strong postgraduate student body which now numbers about 7,000, well over a third of the full-time students. Postgraduates are attracted to Oxford by the international standing of the faculty, by the rigorous intellectual training on offer, by the excellent research and laboratory facilities available, and by the resources of the museums and libraries, including one of the world's greatest libraries, the Bodleian.

For more information please visit www.ox.ac.uk

The Mathematical, Physical, and Life Sciences Division

The Mathematical, Physical, and Life Sciences Division (MPLS) is one of the four academic divisions of the University. Oxford is widely recognised as one of the world's leading science universities. In the 2008 UK Research Assessment Exercise over 70% of research activity in MPLS was judged to be world-leading (4*) or internationally excellent (3*), and Oxford was ranked first in the UK across the mathematical sciences as a whole.

The MPLS division's ten departments and three interdisciplinary units span the full spectrum of the mathematical, computational, physical, engineering and life sciences, and undertake both fundamental research and cutting-edge applied work. We have over 6,000 students and research staff, and generate over half of our funding from external research grants. Our research addresses major societal and technological challenges and is increasingly interdisciplinary in nature. We collaborate closely with colleagues in Oxford across the medical sciences, social sciences and humanities, as well as with researchers from around the world.

For more information, please visit: www.mpls.ox.ac.uk .

The Department of Earth Sciences

The Department of Earth Sciences has an academic staff of 24 who carry out world-class research programmes in geology, geophysics, and geochemistry, covering much of modern Earth Sciences. In addition, there are 6 senior research fellows, some 25 postdoctoral workers and about 50 postgraduate students. The Department has recently moved into a new, purpose-built building providing substantial new laboratory, office and teaching accommodation. Teaching and research are supported by a staff of 13 research, technical and IT support staff and 8 administrative and secretarial staff.

Research Environment

The department has research programmes covering a broad range of modern Earth Sciences. Geophysics research includes internationally leading groups in global and earthquake seismology, active tectonics, geodesy and remote sensing, high-pressure mineral physics, marine geophysics and geological fluid mechanics. The department has one of the best-equipped geochemical laboratories worldwide, and the geochemistry group carries out research over a broad range of areas from planetary evolution to palaeoclimate and modern climate change. The department's record in field-based research is also outstanding, with strong collaborative programmes in continental deformation and metamorphism, palaeoenvironments, stratigraphy, sedimentology, palaeomagnetism, and palaeobiology.

In addition to extensive leading-edge laboratory facilities associated with research groups in geochemistry, palaeomagnetism, ultra high-pressure materials and mineralogy, the department has a well-developed unix-based computer network which is used by, among others, research groups in geodesy, marine geophysics, seismology, mineral physics, fluid mechanics and geochemistry. There are numerous PC and Mac computers used for research and administrative tasks throughout the department. A fully integrated and secure broad-band network is supported and maintained by two systems administrators. The department also has a well-equipped workshop with high-precision engineering facilities. There are also laboratories for thin-section preparation and rock crushing. The Radcliffe Science Library, which has extensive holdings of scientific periodicals and books, is nearby. There is also a good working library within the department.

Teaching

The strong sense of community in the department allows its research excellence to translate into highly effective teaching, not only in lectures and tutorials (very small groups, usually one or two students) but also in the close contact afforded by laboratory and field teaching, the latter currently in England, Scotland, Wales, Bermuda and Greece. We provide a broadly based education in the earth sciences, encompassing observational, experimental, and quantitative aspects of the subject, and constituting an excellent foundation for careers in academic research and industry. Approximately 30 students are admitted each year to read for the degrees of BA (three-year course) and M.Earth.Sc. (four-year course). Students

studying for the four-year degree take options and undertake a research project during the fourth year.

Each undergraduate spends some 90 to 100 days in the field, comprising instructional field courses, day excursions to study local geology, and an independent mapping project carried out during the summer following the second year. The field courses and excursions are organized and run by members of the academic staff. The course is supported by an extensive system of tutorials, small classes and 4th-year project work.

For further information about the department please visit www.earth.ox.ac.uk .

St Cross College

There are 38 self-governing and independent colleges at Oxford, giving both academic staff and students the benefits of belonging to a small, interdisciplinary community as well as to a large, internationally-renowned institution. The collegiate system fosters a strong sense of community, bringing together leading academics and students across subjects, and from different cultures and countries.

Official Fellowships at St Cross

Founded in 1965 and occupying a site in central Oxford, St Cross is a multidisciplinary graduate society through which men and women graduates are admitted to study for advanced degrees and diplomas of the University: there is no restriction on subject. The College community comprises some 100 Fellows, covering a wide variety of disciplines in the sciences and humanities and approximately 500 graduate students, about two thirds from overseas. All Fellows and students enjoy equal membership of the Common Room.

An Official Fellowship of St Cross carries with it no additional stipend, but all Fellows are entitled to free weekday lunches in the College and have access to rooms for entertaining, meetings and overnight accommodation for professional colleagues and other visitors at internal rates. The College provides a number of dinners per term which are useful for entertaining colleagues and visitors at favourable rates.

All Official Fellows are members of the College's Governing Body and there is an expectation that Fellows will attend meetings as often as they can. Fellows are co-opted onto various College Committees to assist with the running of the College. St Cross expects its Fellows to become College Advisors for a limited number of students which involves being available to give advice and support as and when it is required.

Further information can be found on the website at www.stx.ox.ac.uk .

Standard Terms and Conditions

Standard duties

(i) to lecture, or hold classes, in at least two of the three university terms and to give at least thirty-six lectures or classes in all and not less than twelve in each of two terms; and

(ii) to undertake research and original work and the general supervision of research and advanced work in your subject and department, and to assist students in their studies by advice or informal instruction.

It is expected that professors will generally participate in the business and affairs of the relevant faculty or department.

Salary, benefits and pension

The salary of the person appointed will be determined by the Vice-Chancellor, after appropriate consultation. In addition the professor will be eligible for consideration, in regular reviews, for one of a number of additional salary awards which may be made in recognition of outstanding academic distinction and/or contribution to the academic work of the University (e.g. in leadership in, or in the development of, some field of study).

The salaries of professors at Oxford are generally above the average of those in other leading UK universities.

An additional pensionable allowance will be payable in respect of any period during which the professor is Head of Department/Faculty Board Chairman. (Any allowance payable for a period of less than three years will not, however, be pensionable.)

Eligible staff may join the Universities Superannuation Scheme. Details are available on the website at <http://www.admin.ox.ac.uk/finance/pensions/uss/>.

Length of appointment

The professorship is tenable until retirement. The University is considering proposals to adopt the 30 September preceding the 68th birthday as the normal retirement date for academic staff and to have procedures, which may be amended from time to time, for considering requests to work beyond that date.

Sabbatical leave and outside commitments

All professors may apply for sabbatical leave to allow them to focus on their research. In general, one term of leave is available for each six terms worked. This leave may either be taken as one term of leave after 6 terms of service, or accumulated and taken as one year of leave after 6 years of service.

Professors may also spend up to 30 working days in each year on projects outside their employment duties, such as consultancy, spin-out activity and membership of research councils and other bodies. There is no limit to the amount of money which staff may earn from these activities. Full details are available on the university website at <http://www.admin.ox.ac.uk/personnel/staffinfo/academic/approvaltoholdoutsideappointments/>. Guidance on ownership of intellectual property (<http://www.admin.ox.ac.uk/statutes/regulations/182-052.shtml>) and managing conflicts of interest (<http://www.admin.ox.ac.uk/researchsupport/integrity/conflict/policy/>) is also available on the university website.

Residence

Professors are required to reside within the University (i.e. within twenty-five miles of Carfax, the central point of Oxford) during at least six months in each academic year, between 1 October and 1 August, and in particular during not less than six weeks of each term.

Relocation expenses

Subject to HMRC regulations and the availability of funding, a relocation allowance may be available. Further details are available on the website at <http://www.admin.ox.ac.uk/finance/expenses/relocationscheme/>.

Family support

The University has generous maternity and adoption leave arrangements, and also offers support leave to fathers and partners. Additional paternity leave of up to 26 weeks (for children born or placed for adoption after 3 April 2011) is available where parents decide to share the 52 week maternity leave entitlement. Details are available on the website at <http://www.admin.ox.ac.uk/personnel/during/family/>.

All staff are eligible to apply to use the University nurseries (although there is a long waiting list for nursery places), and the full range of tax and National Insurance savings scheme is in operation. Details are available on the University's childcare website at <http://www.admin.ox.ac.uk/eop/childcare/>.

The University will try to accommodate flexible working patterns as far as possible and there is considerable flexibility in the organisation of duties. More information on family support and flexible working policies is available on the website at <http://www.admin.ox.ac.uk/personnel/during/family/>.

Facilities and services

The University has a range of facilities and benefits for its staff; more details are available on the website at <http://www.admin.ox.ac.uk/personnel/staffinfo/benefits/>.

The University Disability Office provides support to staff and students with a disability and may be contacted through its website at <http://www.admin.ox.ac.uk/eop/disab/>.

Equality of opportunity

The policy and practice of the University of Oxford require that all staff are offered equal opportunities within employment. Entry into employment with the University and progression within employment will be determined only by personal merit and the application of criteria which are related to the duties of each particular post and the relevant salary structure. In all cases, ability to perform the job will be the primary consideration. Subject to statutory provisions, no applicant or member of staff will be treated less favourably than another because of age, disability, gender reassignment, marriage or civil partnership, pregnancy or maternity, race, religion or belief, sex, or sexual orientation.

Medical questionnaire and the right to work in the UK

The appointment will be subject to the satisfactory completion of a medical questionnaire and the provision of proof of the right to work in the UK.

Applicants who would need a work visa if appointed to the post are asked to note that they may need to enter the UK under the Tier 1 (Exceptional talent) category of the UK's points-based system. Further information is available at: <http://www.ind.homeoffice.gov.uk/workingintheuk/tier1/exceptional-talent/>.

Special arrangements

Oxford welcomes applications from candidates who have a disability. These documents will be made available in large print, audio or other formats on request. Applicants invited for interview will be asked whether they require any particular arrangements to make the interview more convenient and effective for them.

Data Protection

All data supplied by candidates will be used only for the purposes of determining their suitability for the post and will be held in accordance with the principles of the Data Protection Act 1998 and the University's Data Protection Policy (available on the website at <http://www.admin.ox.ac.uk/councilsec/dp/policy.shtml>).