## **Department of Physics**

Clarendon Laboratory Parks Road, Oxford OX1 3PU



## **Job Description and Selection Criteria**

Job title	Head of Technical Services Group
Division	Mathematical Physical and Life Sciences
Department	Physics
Location	Clarendon Laboratory / Denys Wilkinson Building / Robert Hooke Building
Grade and salary	Grade 10 £55,750 - £64,605 p.a. with discretionary range to £70,579 p.a.
Hours	Full time
Contract type	Permanent
Reporting to	Head of Administration and Finance
Vacancy reference	150815
Additional information	Closing date – midday (UK time) on 15 June 2021

#### The role

The academic endeavor of Physics at Oxford is supported by a variety of technical services, ranging from small, specialized facilities to large operations including Mechanical and Electronics Workshops. This role leads the strategic direction of these key facilities, and works closely with academics and facility leaders in ensuring that the technical services of the department are efficiently resourced, deployed and developed to continue to support the world-leading science of the department, and to meet new and evolving challenges.

The Technical Services Group (TSG) is made up of the Mechanical Engineering Group (MEG) and Electronics Engineering Group (EEG) ,, Thin Films Facility (TFF), Photofabrication Unit (PFU), Cryo Magnetics Group, Nano Fabrication Facility, Infrared Multipayer Laboratory (IML) and the Space Instruments Group. The TSG is charged with the support of teaching and research across the whole department and has impact and interactions with projects and research ranging from large telescope arrays, beamline projects at CERN, space flight instrumentation, fixed target Dark Matter and Neutrino experiments, to atomic-level and ultra-low temperature experiments.









The work of the Technical Services Group can be very varied and challenging; technological boundaries are being reached and overcome through the research carried out in the Department of Physics, and it is in the design and manufacturing phases where much of the advancement in this new technology can be instigated. We are seeking a leader who has the drive, determination and leadership to take an idea from concept to final product, helping Oxford Physics advance the boundaries of science.

## Responsibilities

- Strategic leadership for the direction, resources, budgets and skillsets for the Technical Services
  Group (TSG) of the Department of Physics, including line management of the eight facility
  leaders (Mechanical Engineering Group (MEG) and Electronics Engineering Group (EEG) ,, Thin
  Films Facility (TFF), Photofabrication Unit (PFU), Cryo Magnetics Group, Nano Fabrication
  Facility, Infrared Multipayer Laboratory (IML) and the Space Instruments Group), across
  multiple sites.
- Overall budget holder for the Technical Services Group with accountability for income and expenditure budgets of c£2m per annum and responsibility for operating facilities in a cost effective and sustainable manner.
- Expanding and developing on existing and new sources of revenue for the department, building on engineering and technical strengths to widen and deepen income streams, including commercial negotiations with current and evolving clients.
- Build and develop strong relationships with world-leading academics in Oxford, and more widely in the UK and internationally.
- Continuous improvement of the TSG offering to meet existing and emerging design and
  engineering issues in multiple areas of physical science. Build the reputation and standing of
  the Oxford Physics technical services teams to be recognized as a centre of excellence
  internationally.
- Provide expert guidance to project and programme leaders, both technical and managerial on high level, multi-disciplinary and multi-institutional initiatives. Responsibility for management of competing deadlines, prioritisation of key workstreams and achieving key milestones across a multitude of complex projects
- Represent the TSG and the department at relevant departmental, divisional and institutional committees.
- Primary responsibility for the design and operation of future technical services and infrastructure.
- Influence academic colleagues, decision makers and funding providers (within Oxford and more
  widely) as to the strategic importance of current and future technical services provision for the
  successful execution of the academic aspirations of a world-leading department.

#### Hazard-specific / Safety-critical duties

• This job is generally office-based, requiring DSE assessment. There will be occasions when the post holder will be required to enter a workshop or laboratory for oversight and assistance of manufacturing and will therefore need to be conversant with the relevant safety procedures and standards operating in that area.

#### Selection criteria

#### **Essential**

- Demonstrable experience in leading a high-tech engineering group, particularly in a scientific or research environment, and of prioritising and achieving challenging and competing deadlines;
- A minimum requirement of a degree qualification and preferably a professional qualification or equivalent in-job experience in engineering, project management or a related subject;
- Demonstrable experience of managing a diverse technical team; Excellent leadership qualities
  and skills, having an ability to direct and unify the direction of diverse teams of engineers and
  scientists.
- Proven capability to think effectively on both strategic and operational levels.
- Experience in project engineering and project management, Experience and a sound working knowledge of Quality Assurance and Control procedures and processes relevant to design, analysis and manufacture. Knowledge and experience in the operation and use of the change control, configuration process and also Issue and Risk management. Excellent communication and interpersonal skills together with a positive attitude;
- Excellent IT skills, including the ability to review engineering, modelling and design related software and recommend functionality improvements.
- Experience of line management, either direct, matrix or functional.

#### Desirable

- Be a member of a relevant professional body.
- Experience of providing specialist engineering advice to industry.
- Experience of Quality assurance and control processes within an academic environment. Trained in the application of standards like ISO9001
- Experience of working in the University sector, or a large diverse public sector environment;
- Qualification/experience in system engineering;
- Interest in science.

## **About the University of Oxford**

Welcome to the University of Oxford. We aim to lead the world in research and education for the benefit of society both in the UK and globally. Oxford's researchers engage with academic, commercial and cultural partners across the world to stimulate high-quality research and enable innovation through a broad range of social, policy and economic impacts.

We believe our strengths lie both in empowering individuals and teams to address fundamental questions of global significance, while providing all our staff with a welcoming and inclusive workplace that enables everyone to develop and do their best work. Recognising that diversity is our strength, vital for innovation and creativity, we aspire to build a truly diverse community which values and respects every individual's unique contribution.

While we have long traditions of scholarship, we are also forward-looking, creative and cutting-edge. Oxford is one of Europe's most entrepreneurial universities. Income from external research contracts in 2014/15 exceeded £522.9m and we rank first in the UK for university spin-outs, with more than 130 companies created to date. We are also recognised as leaders in support for social enterprise.

Join us and you will find a unique, democratic and international community, a great range of staff benefits and access to a vibrant array of cultural activities in the beautiful city of Oxford.

For more information please visit www.ox.ac.uk/about/organisation

## **Department of Physics**

Oxford Physics is one of the largest and most eminent departments in Europe – pursuing forefront research alongside training the next generation of leaders in Physics.

With an academic staff of almost one hundred our activities range from fundamental particles to the furthest reaches of the universe to manipulating matter on an atomic scale. Oxford physicists are probing new ways to harness solar energy, modelling the Earth's atmosphere to predict the future climate, exploring computation on the quantum scale and executing calculations that reveal the fundamental structure of space and time.

For more information please visit: <a href="http://www2.physics.ox.ac.uk/">http://www2.physics.ox.ac.uk/</a>

The post-holder will be based within Central Physics. This is the central function that supports the six sub-departments that together make up the Department of Physics; these are Astrophysics, Atomic and Laser Physics, Atmospheric, Oceanic and Planetary Physics, Condensed Matter Physics, Particle Physics and Theoretical Physics. Members of all sub-departments take part in research, teaching and matters such as examinations, discussion of syllabi, lectures and liaison with undergraduates and postgraduate students.

#### Athena Swan Charter

The Department of Physics holds a silver Athena Swan award to recognise advancement of gender equality: representation, progression and success for all.

### Mathematical, Physical & Life Sciences Division

The Mathematical, Physical and Life Sciences (MPLS) Division is one of the four academic divisions of the University of Oxford.

The MPLS Division's 10 departments and 3 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. Our research addresses major societal and technological challenges and is increasingly focused on key interdisciplinary issues. We collaborate closely with colleagues in Oxford across the medical sciences, social sciences and humanities, and with other universities, research organisations and industrial partners across the globe in pursuit of innovative research geared to address critical and fundamental scientific questions.

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

## How to apply

Before submitting an application, you may find it helpful to read the 'Tips on applying for a job at the University of Oxford' document, at <a href="https://www.ox.ac.uk/about/jobs/supportandtechnical/">www.ox.ac.uk/about/jobs/supportandtechnical/</a>.

If you would like to apply, click on the **Apply Now** button on the 'Job Details' page and follow the on-screen instructions to register as a new user or log-in if you have applied previously. Please provide details of two referees and indicate whether we can contact them now.

You will also be asked to upload a CV and a supporting statement. The supporting statement must explain how you meet each of the selection criteria for the post using examples of your skills and experience. This may include experience gained in employment, education, or during career breaks (such as time out to care for dependants).

Your application will be judged solely on the basis of how you demonstrate that you meet the selection criteria stated in the job description.

Please upload all documents **as PDF files** with your name and the document type in the filename.

All applications must be received by **midday** on the closing date stated in the online advertisement.

#### Information for priority candidates

A priority candidate is a University employee who is seeking redeployment because they have been advised that they are at risk of redundancy, or on grounds of ill-health/disability. Priority candidates are issued with a redeployment letter by their employing departments.

If you are a priority candidate, please ensure that you attach your redeployment letter to your application (or email it to the contact address on the advert if the application form used for the vacancy does not allow attachments)

Should you experience any difficulties using the online application system, please email <a href="mailto:recruitment.support@admin.ox.ac.uk">recruitment.support@admin.ox.ac.uk</a>. Further help and support is available from

<u>www.ox.ac.uk/about\_the\_university/jobs/support/</u>. To return to the online application at any stage, please go to: <u>www.recruit.ox.ac.uk</u>.

Please note that you will be notified of the progress of your application by automatic emails from our e-recruitment system. **Please check your spam/junk mail** regularly to ensure that you receive all emails.

## Important information for candidates

#### **Pre-employment screening**

Please note that the appointment of the successful candidate will be subject to standard preemployment screening, as applicable to the post. This will include right-to-work, proof of identity and references. We advise all applicants to read the candidate notes on the University's preemployment screening procedures, found at:

www.ox.ac.uk/about/jobs/preemploymentscreening/.

## The University's policy on retirement

The University operates an Employer Justified Retirement Age (EJRA) for all academic posts and some academic-related posts. From 1 October 2017, the University has adopted an EJRA of 30 September before the 69<sup>th</sup> birthday for all academic and academic-related staff in posts at grade 8 and above. The justification for this is explained at: www.admin.ox.ac.uk/personnel/end/retirement/revisedejra/revaim/.

For **existing** employees, any employment beyond the retirement age is subject to approval through the procedures: <a href="www.admin.ox.ac.uk/personnel/end/retirement/revisedejra/revproc/">www.admin.ox.ac.uk/personnel/end/retirement/revisedejra/revproc/</a>

Form 1 October 2017, there is no normal or fixed age at which staff in posts at **grades 1–7** have to retire. Staff at these grades may elect to retire in accordance with the rules of the applicable pension scheme, as may be amended from time to time.

#### **Equality of Opportunity**

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. No applicant or member of staff shall be discriminated against because of age, disability, gender reassignment, marriage or civil partnership, pregnancy or maternity, race, religion or belief, sex, or sexual orientation.

## Benefits of working at the University

## **University Club and sports facilities**

The University Club provides social, sporting and hospitality facilities. It incorporates a bar, café and sporting facilities, including a gym. Staff can also use the University Sports Centre on Iffley Road at discounted rates, including a fitness centre, powerlifting room, and swimming pool. See: www.club.ox.ac.uk and www.sport.ox.ac.uk/oxford-university-sports-facilities.

# Information for international staff (or those relocating from another part of the UK)

If you are relocating to Oxfordshire from overseas, or elsewhere in the UK, the University's International Staff website includes practical information related to moving to and settling in Oxford such as advice on immigration, relocation, accommodation, or registering with a doctor. See: www.internationalstaffwelcome.admin.ox.ac.uk/

## The University of Oxford Newcomers' Club

The University of Oxford Newcomers' Club is an organisation run by volunteers that aims to assist the partners of new staff to settle into Oxford and to provide them with an opportunity to meet people in the area. See <a href="https://www.newcomers.ox.ac.uk/">www.newcomers.ox.ac.uk/</a>

### Childcare

The University has excellent childcare services with five University nurseries, as well as University-supported places at many other private nurseries. For full details including how to apply and the costs, see <a href="https://www.admin.ox.ac.uk/childcare">www.admin.ox.ac.uk/childcare</a>.

## Family-friendly benefits

The University subscribes to My Family Care

(<u>www.admin.ox.ac.uk/personnel/staffinfo/benefits/family/mfc/</u>) and staff are eligible to register for emergency back-up childcare and adultcare services, a 'speak to an expert' phone line and a wide range of guides and webinars through a website called the Work + Family space.

#### Disabled staff

We are committed to supporting members of staff with disabilities or long-term health conditions. Please visit <a href="www.admin.ox.ac.uk/eop/disab/staff">www.admin.ox.ac.uk/eop/disab/staff</a> for further details including information about how to make contact, in confidence, with the University's Staff Disability Advisor.

#### Staff networks

The University has a number of staff networks including the Oxford Research Staff Society, BME staff network, LGBT+ staff network and a disabled staff network. You can find more information at <a href="https://www.admin.ox.ac.uk/eop/inpractice/networks/">www.admin.ox.ac.uk/eop/inpractice/networks/</a>

#### Other benefits

Staff can enjoy a range of other benefits such as free visitor access to the University's colleges and the Botanic Gardens as well as a range of discounts.

See www.admin.ox.ac.uk/personnel/staffinfo/benefits