



### ENGINEERING SCIENCE

Job title	Laboratory Manager
Division	Mathematical, Physical and Life Sciences Division
Department	Engineering Science
Location	Begbroke Science Park, Woodstock Road, Begbroke, OX5 1PF
Grade and salary	Grade 7: £36,024 - £44,263 per annum
Hours	Full time
Contract type	Fixed-term for 5 years
Reporting to	Professor Paul Shearing, Statutory Professor of Sustainable Energy Engineering
Vacancy reference	174232

# The role

The Laboratory Manager will have responsibility for the oversight of all laboratories under the leadership of Professor Paul Shearing, Professor of Sustainable Energy Engineering.

The successful candidate will ensure that all procedures carried out in the space and on the equipment provided adhere to protocols and current legislation, as appropriate, and are correctly documented.

You will have day-to-day responsibility for laboratory management as well as providing induction and training for new members of staff and graduate students. You will liaise closely with the Building and Facilities teams within the Begbroke Science Centre as well as other Departmental Safety Officers and the Divisional Safety Officers.

The Laboratory Manager will play a pivotal role in ensuring that the laboratories are effectively managed. Working closely with the Professor of Sustainable Energy Engineering, you will ensure the laboratories provide a clean and safe working environment. You will maintain an inventory of materials and equipment, ensuring maintenance contracts are kept up to date; and you will manage the purchasing of consumables and equipment with streamlined procurement of reagent and protocols. You will be responsible for the safe holding, use and disposal of chemicals within the labs, carrying out regular checks of the laboratory spaces, particularly chemical storage and fume cupboards. At various times you will take responsibility for coordinating laboratory matters on specific grants including attending project meetings and training researchers.

You will oversee training of new researchers, ensuring that all staff have received appropriate training and have knowledge of the health and safety policies to be considered. You will also









ensure that the new researchers maintain up to date health and safety records, as well as work with the IT department on maintenance of the laboratory computers and management of the equipment booking system. You will assess competence and will provide training and day-to-day oversight/support, liaising with, and reporting to, the Departmental Safety Officer as needed.

You will oversee the management of shared laboratory facilities, including X-ray computed tomography equipment, assisting with maintenance and planning, and supporting training and access for internal and external users.

## Responsibilities

#### Research laboratories

- Assume overall responsibility for the efficient and effective running of the laboratories. Pro-actively monitor on a daily basis all aspects of laboratory work, cleanliness and waste disposal to ensure the working environment is optimal for efficient and safe working. Oversee weekly laboratory clean up sessions and ensure waste disposal routes are correctly adhered to.
- Manage strategic equipment assets, including X-ray computed tomography equipment, and deliver appropriate training and user support.
- Maintain an up-to-date inventory of materials and equipment and ensure equipment maintenance contracts are kept up to date.
- Manage on behalf of Professor Paul Shearing, Professor of Sustainable Energy Engineering 's, the safety and laboratory maintenance budget. Negotiate maintenance contracts for laboratory equipment and oversee all aspects of equipment repair and routine maintenance, including the handling of day-to-day problems relating to equipment failure, arranging for on or off-site repairs.
- Analyse running costs and explore new avenues to ensure the efficient use of equipment and the reduction of laboratory running costs across the Group. Arrange for contractors and engineers to attend sites, for routine maintenance, repairs and inspections.
- Supervise visitors and contractors ensuring they are fully informed of the relevant safety information and protocols. Provide any personal protective equipment required and issue permits to work where required.
- Regularly update the Professor of Sustainable Energy Engineering on relevant practical and financial aspects of laboratory activities.
- Coordinate the stocking and purchasing of consumables and equipment, shipping of goods between laboratories and working with the finance team as required, subject to the financial procurement rules operated by the Department and University, and their financial procedures. Liaise with administrative and research staff regarding purchases, and with suppliers to achieve good prices and appropriate delivery timescales.
- Manage the purchase, acquisition, storage, and use of chemicals for teaching and research labs and ensure they are disposed of efficiently and safely.

- Assist with the design and interior layout of laboratories in relation to new facilities or refurbishment, and with the detailed configuration of equipment, working and storage spaces. Co-ordinate with the Buildings and Facilities Manager when necessary.
- Work with the IT support team on maintenance of the laboratory computers and management of the laboratory space and equipment booking system and associated online documentation.
- Write up experimental results which would occasionally contribute to small sections (methodology, tables) of publications
- Ensure all necessary SOPs and COSSH paperwork is completed in line with Departmental requirements and to comply with local, departmental and university-wide safety regulations.
- Ensure risk assessments, biological material and microbiological risk assessments are prepared for all lab activities, giving advice where necessary. Review and approve these and ensure they are disseminated and understood by relevant staff.
- If required, maintain records for animal licences with the project licence holder, ensuring all required paperwork, such as accreditation certificates are recorded and held on file.
- Be responsible for supporting and maintaining a strong safety culture in the laboratory, operating within departmental guidelines and including keeping safety documentation up to date.
- Advise on Health and Safety matters and disseminate information regarding any changes in legislation. Maintain complete and up to date records of University Safety literature.
- Ensure laboratory users adhere to health and safety procedures and that the laboratory and its services comply with required standards.
- Write and disseminate protocols and procedures regarding general safety and regularly update as necessary.
- Liaise routinely with the departmental Health & Safety Officers, Divisional Safety Officers and University Safety Officers on health and safety matters assisting with inspections from outside agencies as required.
- Support departmental safety inspections and assist in the resolution of any problems highlighted ensuring that all recommendations are dealt with in a timely fashion.
- Monitor First Aid arrangements and ensure incidents are recorded and sent to the University Safety Office.
- Train, line-manage and supervise specialist laboratory managers at Begbroke Science Centre, to ensure uniform implementation of University and Institute policies and achieve a coordinated approach to safety and risk management.
- Run induction programmes for new staff and students and be responsible for their initial training. Support the Professor of Sustainable Energy Engineering to ensure their staff acquire good laboratory skills and carry out their work properly. Issue personal protective equipment and arrange equipment specific training as required for individual projects.

- Monitor, maintain and update training of all researchers in the lab with regards to good lab practice, health and safety, and experimental protocols. Advise on safe working practices and procedures.
- Act as the first point of contact for all research staff to deal with problems within the laboratories.

#### <u>General</u>

- Attend group meetings
- Have a pro-active approach for possible improvements in the laboratory.
- Be willing to work out of normal working hours (including weekends) if the requirements of the project demand.
- Undertake any other duties which may arise commensurate with the grade of the post as directed by the Professor of Sustainable Energy Engineering.

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

This job includes the following hazard-specific or safety-critical duties which will require successful pre-employment health screening through our Occupational Health Department before the successful candidate will be allowed to start work:

- Regular manual handling
- Working with Ionising Radiation
- Working with category 3b or 4 lasers (laser safety class)

Work with any substance which has any of the following pictograms on their MSDS:



This job description should be viewed as a guide to the role and is not intended as a definitive list of duties. It may be reviewed in light of changing circumstances with consultation with the post holder.

# **Selection criteria**

### Essential

- 1. First degree in life sciences, chemistry or a related field, or equivalent vocational qualification or equivalent experience in laboratory management.
- 2. Experience of working in an experimental laboratory and the ability to manage in an organised manner the day-to-day tasks of experimental research.
- 3. Excellent understanding of the mode of operation and components of complex laboratory instruments, such as microscopes, X-ray equipment, glove boxes, fume hoods and electrochemical testing equipment.
- 4. Experience with complex waste disposal environments

- 5. A good understanding of general health and safety legislation and a specific knowledge of COSHH regulations and experience of working with chemicals within a lab environment. Experience of preparing and maintaining risk assessments and COSHH forms and related documentation.
- 6. Excellent organisational and management skills, self-motivated, and a disciplined and professional approach to work Ability to prioritise work and be able work autonomously.
- 7. Good written and oral communication skills including the ability to communicate with people at all levels. Excellent interpersonal skills.
- 8. Excellent record keeping and documentation abilities.
- 9. Good IT skills.
- 10. The ability to identify and plan contingencies for potential issues that could disrupt research activity and to carry out appropriate research activities within a given time-scale.
- 11. Ability to respond to emergency situations in a professional and calm manner.
- 12. Able to work collaboratively as part of a team, or unsupervised and contribute as an effective member of the team, including interactions with researchers and students from the Department and visitors and collaborators from elsewhere in the University and in industry.
- 13. Ability to assist with the training and supervision of junior researchers.

## Desirable

- 1. Familiarity with University purchasing systems.
- 2. Previous experience in training others in the safe use of equipment or general laboratory skills.

# 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, and in providing all of our staff with a welcoming and inclusive workplace that supports everyone to develop and do their best work. Recognising that diversity is a great strength, and 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 cuttingedge. Oxford is one of Europe's most entrepreneurial universities. Income from external research contracts in 2014/15 exceeded £522.9m and ranked first in the UK for university spinouts, with more than 130 spin-off 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

# **Engineering Science Department**

Engineering teaching and research takes place at Oxford in a unified Department of Engineering Science whose academic staff are committed to a common engineering foundation as well as to advanced work in their own specialities, which include most branches of the subject. We have especially strong links with computing, materials science and medicine. The Department employs about 90 academic staff (this number includes 13 statutory Professors appointed in the main branches of the discipline, and 25 other professors in the Department); in addition there are 9 Visiting Professors. There is an experienced team of teaching support staff, clerical staff and technicians. The Department has well-equipped laboratories and workshops, which together with offices, lecture theatres, library and other facilities have a net floor area of about 22,000 square metres. The Department is ranked first in the world in the latest *Times Higher Education World University Rankings*.

#### Teaching

We aim to admit 160-170 undergraduates per year, all of whom take a 4-year Engineering Science course leading to the MEng degree. The course is accredited at MEng level by the major engineering institutions. The syllabus has a common core extending through the first two years. Specialist options are introduced in the third year, and the fourth year includes further specialist material and a major project.

#### Research

The Department was ranked the top engineering department in the UK, as measured by overall GPA, in the Research Excellence Framework 2014 exercise. We have approximately 350 research students and about 130 Research Fellows and Postdoctoral researchers. Funding for research grants and contracts, from a variety of sources, generates an annual turnover of approximately £34m in addition to general turnover of about £24m. The research activities of the department fall into seven broad headings, though there is much overlapping in practice: Thermofluids; Materials and Mechanics; Civil and Offshore; Information, Control and Vision; Electrical and Optoelectronic; Chemical and Process; Biomedical Engineering.

For more information please visit:

http://www.eng.ox.ac.uk/

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

# The Mathematical, Physical, and Life Sciences Division

The Mathematical, Physical, and Life Sciences (MPLS) Division is one of the four academic divisions of the University. In the results of the six-yearly UK-wide assessment of university research, REF2014, the MPLS division received the highest overall grade point average (GPA) and the highest GPA for outputs. We received the highest proportion of 4\* outputs, and the

highest proportion of 4\* activity overall. More than 50 per cent of MPLS activity was assessed as world leading.

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. MPLS is proud to be the home of some of the most creative and innovative scientific thinkers and leaders working in academe. We have a strong tradition of attracting and nurturing the very best early career researchers who regularly secure prestigious fellowships

We have around 6,000 students and play a major role in training the next generation of leading scientists. Oxford's international reputation for excellence in teaching is reflected in its position at the top of the major league tables and subject assessments.

MPLS is dedicated to bringing the wonder and potential of science to the attention of audiences far beyond the world of academia. We have a strong commitment to supporting public engagement in science through initiatives including the Oxford Sparks portal (<u>http://www.oxfordsparks.net/</u>) and a large variety of outreach activities. We also endeavour to bring the potential of our scientific efforts forward for practical and beneficial application to the real world and our desire is to link our best scientific minds with industry and public policy makers.

For more information about the MPLS division, 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 <u>www.ox.ac.uk/about/jobs/supportandtechnical/</u>.

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. You will then be required to complete a number of screens with your application details, relating to your skills and experience. When prompted, please provide details of **two** referees (one of which must be your current or most recent employer/supervisor) and indicate whether we can contact them at this stage. You will also be required to upload a supporting statement which explains how you meet the selection criteria for the post.

#### **Supporting Statement**

The supporting statement should describe your skills and experience relevant to the post. These may have been gained through employment, education/training, voluntary/community work or you may have taken time away from these activities in order to raise a family, care for a dependent, or travel for example. Your application will be judged solely on the basis of how you demonstrate that that you meet the selection criteria outlined above and we are happy to consider evidence of transferable skills or experience which you may have gained outside the context of paid employment or education. *We will short list for interview those whose applications best demonstrate that the applicant meets the selection criteria, so it is important that you use your supporting statement to explain clearly, point by point, how you match them.* Please note that a copy of a CV will not be accepted as substitute for a supporting statement and that inclusion of the statement is a mandatory step in the online application process.

#### References

Please give the details of people who can provide a reference for you. If you have previously been employed, your referees should be people who have managed you, and at least one of them should be your formal line manager in your most recent or current job. Otherwise they may be people who have supervised you in a recent college, school, or voluntary experience. It is helpful if you can tell us briefly how each referee knows you (e.g. 'line manager', 'college tutor'). Your referees should not be related to you.

We will assume that we may approach them at any stage unless you tell us otherwise. If you wish us to ask for your permission before approaching a particular referee, or to contact them only under certain circumstances (for example, if you are called to interview) you must state this explicitly alongside the details of the relevant referee(s).

If you currently work, or have previously worked, for the University of Oxford, we will also take up a reference from the head or administrator of the previous employing department. This will be in addition to taking references from the referees you have provided.

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 <u>recruitment.support@admin.ox.ac.uk</u>. 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/.

## **Data Privacy**

Please note that any personal data submitted to the University as part of the job application process will be processed in accordance with the GDPR and related UK data protection legislation. For further information, please see the University's Privacy Notice for Job Applicants at: <a href="http://www.admin.ox.ac.uk/councilsec/compliance/gdpr/privacynotices/job/">www.admin.ox.ac.uk/councilsec/compliance/gdpr/privacynotices/job/</a>. The University's Policy on Data Protection is available at:

www.admin.ox.ac.uk/councilsec/compliance/gdpr/universitypolicyondataprotection/.

### 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: <u>www.admin.ox.ac.uk/personnel/end/retirement/revisedejra/revproc/</u>

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: <a href="http://www.club.ox.ac.uk">www.club.ox.ac.uk</a> and <a href="http://www.sport.ox.ac.uk/oxford-university-sports-facilities">www.club.ox.ac.uk</a> and <a href="http://www.sport.ox.ac.uk/oxford-university-sports-facilities">www.sport.ox.ac.uk/oxford-university-sports</a> Centre on Iffley Road at discounted rates, including a fitness centre, powerlifting room, and swimming pool. See: <a href="http://www.sport.ox.ac.uk/oxford-university-sports-facilities">www.sport.ox.ac.uk/oxford-university-sports-facilities</a>.

# 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: <a href="https://www.internationalstaffwelcome.admin.ox.ac.uk/">www.internationalstaffwelcome.admin.ox.ac.uk/</a>

# 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="http://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 <u>www.admin.ox.ac.uk/childcare</u>.

## 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 <u>www.admin.ox.ac.uk/eop/disab/staff</u> 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="http://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