

# Job Description and Selection Criteria

Job title	Technology Associate, QCi3 Hub
Division	Mathematical, Physical and Life Sciences
Department	Physics
Location	Clarendon Laboratory, Oxford
Grade and salary	Grade 8: £48,235 - £57,255 per annum
Hours	Full time
Contract type	Fixed-term for 1 year
Reporting to	Co-Director for Engagement, QCi3 Hub
Vacancy reference	176911
Additional information	Closing date is 12 noon on 6 <sup>th</sup> January 2025

## The role

You will be one of a small Engagement Team working with the researchers and partners of the EPSRC Hub for Quantum Computing via Integrated and Interconnected Implementations (QCi3 Hub). This will require liaison between three communities:

**Research base**. You will develop a detailed knowledge of the Hub's research, spanning the work of over 50 Co-Investigators across 18 UK institutions, and help researchers deliver impact from their work.

**Partners.** You will facilitate collaboration between new and existing Academic and Industrial Partners, and QCi3 Hub researchers and leadership.

**UK National Quantum Technologies Programme**. You will communicate and collaborate with the other Quantum Technology Hubs, the National Quantum Computing Centre (NQCC), the National Physical Laboratory (NPL), EPSRC, the UK Government Office for Quantum and other parts of the UK Quantum Technologies programme. You will also support the Hub's public dialogue and outreach efforts.

The QCi3 Hub is a strategic collaboration of 18 universities and research institutions, supported by 27 industrial partners, which is focused on taking quantum computing from the lab to the real world. The QCi3 Hub is a new project, building on the work of the last ten years undertaken in the Networked Quantum Information Technologies (NQIT) and Quantum Computing & Simulation (QCS) Hubs, as part of the UK's National Quantum Technologies Programme (NQTP). We have a superb team of scientists, engineers, professional support staff and students working on software and small-scale quantum processors and simulators, and critical technologies for fully scalable machines.









You will already have, or be able to develop an in-depth knowledge of the relevant science, and possess the interpersonal skills to work constructively with leading scientists and to explain, in clear terms to non-specialist users, the potential of the ideas generated. You will report to the QCi3 Hub Co-Director for Engagement and work with researchers and support staff in Oxford and other Hub universities and also with other parties in the UK National Quantum Technologies Programme (UK NQTP).

## Place of Work

The normal place of work will be within the Physics Department in Oxford; some overnight travel and short-term work away from Oxford may be required, normally not more than a total of 8 weeks in any one year (FTE).

# Responsibilities

- 1. Present the work of the Hub to external audiences to promote knowledge exchange, translating scientific and technical concepts where necessary and using a variety of routes (including via the web, in presentations and through personal networking).
- 2. Organise events at which members of the Hub can meet potential beneficiaries and collaborators of their research from both academia and industry.
- 3. Identify potential opportunities for technology transfer and joint R&D, possible industrial partners and sources of funding for such projects, using an appreciation of the research carried out, insight into the needs of industry and detailed liaison between the two communities. Assist with the preparation and management of project proposals as required.
- 4. Actively manage relationships with industrial partners, including by regular contact with company representatives, following-up of administrative actions from discussions, organisation of visits, reporting of research outcomes and seeking of continuing opportunities to engage existing partners more closely with the Universities of the QCi3 Hub.
- 5. Engage with the Hub's Responsible Research and Innovation team to ensure that technologies are developed with the widest understanding of their potential implications.
- 6. Work with colleagues and the Hub's Senior Leadership team to contribute to the development of government policy and practice, including by leading responses to calls for evidence
- 7. Provide training and information across QCi3 Hub, partners and UK NQTP members to ensure as wide a spread of knowledge of developments as possible and to encourage a flow of information in all directions.
- 8. Liaise with counterparts in other Departments, Divisions and partner Universities and UK NQTP organisations, to develop and share best practice.
- 9. Work closely with the QCi3 Hub Communications and Events Specialist to publicise discoveries, opportunities and events across the QCi3 programme to partners and other interested parties, as well as generate written and other material to further the Hub's communications strategy.
- 10. Support and encourage commercialisation efforts in the Hub through training, publicising opportunities and offering an impartial source of advice to the researcher community.
- 11. Deputise for the Co-Director for Engagement as required.
- 12. Other similar duties as assigned by the Co-Director for Engagement or Director of the Hub.

# **Selection criteria**

## Essential

- Good degree in a relevant STEM subject.
- Experience of or exposure to scientific research ideally in both academic and industrial environments.
- Sufficient understanding of information technologies to help learn about quantum information technologies and present its purpose, novelty and outcomes effectively to a general audience.
- Ability to communicate clearly and effectively in both written and spoken English and with the appropriate use of information technology.
- Experienced and confident in presenting to a range of audiences.
- Able to inspire and motivate others from both technical and non-technical backgrounds
- Highly developed networking and liaison skills and contacts across both academic research and industry.
- Developed influencing and organisational skills to influence the work and overall direction of the QCi3 Hub.
- Confident and self-motivated with an ability to take a lead on a variety of tasks and across work streams.

## Desirable

- Experience in technology transfer, ideally with experience of the commercialisation of a scientific advance.
- An appreciation of the scientific research relevant to the Hub's programme (e.g. in quantum physics, communications and systems engineering, computer science and/or quantum materials) and the ways in which academic research projects are undertaken.
  Experience of working in collaborative teams involving both academia and industry, ideally having had some responsibility for communication, reporting and/or management.
- Experience of the preparation of funding applications, business cases or equivalent.
- Some understanding of intellectual property and contractual issues in scientific research.
- Formal project management training.
- A PhD in a relevant scientific area.
- Experience in one or more of the following fields: Chemistry and Materials, Fluid Simulation, Machine Learning.

# 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 cuttingedge. Oxford is one of Europe's most entrepreneurial universities. Income from external research contracts in 2016/17 exceeded £564m and we rank first in the UK for university spinouts, 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: <u>http://www2.physics.ox.ac.uk/</u>

### Atomic and Laser Physics Sub-department

The post-holder will be based in the Atomic and Laser Physics sub-department, which is one of 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, with a seventh function (Central Physics) providing administrative and technical support to these sub-departments. 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: <a href="http://www.mpls.ox.ac.uk/">http://www.mpls.ox.ac.uk/</a>

## 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. 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)

## If you need help

Application FAQs, including technical troubleshooting advice is available at:

https://staff.web.ox.ac.uk/recruitment-support-fags

Non-technical questions about this job should be addressed to the recruiting department directly recruitment@physics.ox.ac.uk

To return to the online application at any stage, please go to: www.recruit.ox.ac.uk.

Please note that you will receive an automated email from our online recruitment portal to confirm receipt of your application. Please check your spam/junk mail if you do not receive this email. 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 pre-employment screening procedures, found at: <u>www.ox.ac.uk/about/jobs/preemploymentscreening/</u>.

# Important information for candidates

#### 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:

<u>https://compliance.admin.ox.ac.uk/job-applicant-privacy-policy</u>. The University's Policy on Data Protection is available at: <u>https://compliance.admin.ox.ac.uk/data-protection-policy</u>.

#### The University's policy on retirement

The University operates an Employer Justified Retirement Age (EJRA) for very senior research posts at **grade RSIV/D35 and clinical equivalents E62 and E82**, which with effect from 1 October 2023 will be 30 September before the 70<sup>th</sup> birthday. The justification for this is explained at: https://hr.admin.ox.ac.uk/the-ejra.

For **existing** employees on these grades, any employment beyond the retirement age is subject to approval through the procedures: <u>https://hr.admin.ox.ac.uk/the-ejra.</u>

There is no normal or fixed age at which staff in posts at other grades 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

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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

## Employee benefits

University employees enjoy 38 days' paid holiday, generous pension schemes, travel discounts, and a variety of professional development opportunities. Our range of other employee benefits and discounts also includes free entry to the Botanic Gardens and University colleges, and discounts at University museums. See <a href="https://hr.admin.ox.ac.uk/staff-benefits">https://hr.admin.ox.ac.uk/staff-benefits</a>

## University Club and sports facilities

Membership of the University Club is free for all University staff. The University Club offers social, sporting, and hospitality facilities. 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="https://www.club.ox.ac.uk">www.club.ox.ac.uk</a> and <a href="https://www.sport.ox.ac.uk/">https://www.sport.ox.ac.uk/</a>.

#### Information for staff new to Oxford

If you are relocating to Oxfordshire from overseas or elsewhere in the UK, the University's Welcome Service website includes practical information about settling in the area, including advice on relocation, accommodation, and local schools. See <u>https://welcome.ox.ac.uk/</u> There is also a visa loan scheme to cover the costs of UK visa applications for staff and their dependants. See <u>https://staffimmigration.admin.ox.ac.uk/visa-loan-scheme</u>

#### Family-friendly benefits

With one of the most generous family leave schemes in the Higher Education sector, and a range of flexible working options, Oxford aims to be a family-friendly employer. We also subscribe to the Work+Family Space, a service that provides practical advice and support for employees who have caring responsibilities. The service offers a free telephone advice line, and the ability to book emergency back-up care for children, adult dependents and elderly relatives. See https://hr.admin.ox.ac.uk/my-family-care

The University has excellent childcare services, including 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 https://childcare.admin.ox.ac.uk/

## Disabled staff

We are committed to supporting members of staff with disabilities or long-term health conditions. For further details, including information about how to make contact, in confidence, with the University's Staff Disability Advisor, see <u>https://edu.admin.ox.ac.uk/disability-support</u>

#### 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://edu.admin.ox.ac.uk/networks">https://edu.admin.ox.ac.uk/networks</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 settle into Oxford, and provides them with an opportunity to meet people and make connections in the local area. See <u>www.newcomers.ox.ac.uk</u>.