Job Description





DEPARTMENT OF CHEMISTRY

Job title	Analytical Service Crystallographer
Division	Mathematical, Physical and Life Sciences
Department	Department of Chemistry
Location	Chemistry Research Laboratory, 12 Mansfield Road Oxford, OX1 3TA
Grade and salary	Grade 7: £38,674 - £46,913 per annum Discretionary range £48,235 - £51,059 per annum
Hours	Full time
Contract type	Permanent
Reporting to	Chemistry Crystallography Service Manager
Vacancy reference	176298

The role

The X-Ray Crystallography Service is one of the Department's core research facilities based in the Chemistry Research Laboratory Building. The Service houses state of the art equipment (including (at July 2022) two Oxford Diffraction/Agilent (now Rigaku) dual-source SuperNovae, a high flux Rigaku Synergy DW dual-source rotating anode instrument), and a PANanalytical Powder Diffractometer, and provides training for independent users, advice and support to researchers, and an internal and external sample submissions analysis service. The Analytical Service Crystallographer is responsible for the day-to-day delivery of an effective Analytical Chemical Crystallography Service for the Department. They will work in consultation with the Chemical Crystallography Service Manager, the Inorganic Chemistry Section Head and Users at all levels in support of their research and co-author publications as appropriate. The postholder will be an experienced postdoctoral-level crystallographer with a commitment to high quality service provision and to collaborative working.













Responsibilities/duties

- Responsibility for the effective delivery of the Chemical Crystallography Analytical Service in consultation with the Chemical Crystallography Service Manager.
- Support the Chemical Crystallography Service Manager and the Head of Inorganic Chemistry in the strategic development of the Service in line with Departmental objectives.
- In collaboration with the Chemical Crystallography Service Manager, provide a full structural analysis service for members of the Chemistry Department. To include, in successful cases, the provision of a full crystallographic information file and checkCIF document for database deposit and journal submission.
- Support the Chemical Crystallography Service Manager in the delivery of training of researchers to meet the needs of the Department with regard to skills development for students and early career researchers. This includes training and supervision of researchers and students using the instrumentation complying with health and safety regulations.
- Provide advice to researchers at all levels with regard to the use of crystallography in their research.
- Engage closely and provide analytical results to Users at all levels and with the Chemical Crystallography Service Manager regularly review Analytical Service provision and implement changes to increase efficiencies and deliver service improvements.
- Work collaboratively with members of the Chemistry operations teams, including Health and Safety, Facilities, Information Technology and Finance as required.
- Provide information to the Finance Team for cost recovery and support the Chemical Crystallography Service Manager in financial planning for the Service.
- Help supervise summer project students and final year (Part II) MChem student projects (alongside the Chemical Crystallography Service Manager and as agreed with the Associate Head of Department for Teaching), ensuring appropriate induction and compliance with Departmental administrative and health and safety protocols.
- Keep abreast of developments in the field of crystallography and in crystallographic service delivery both in higher education and industry; benchmark and implement best practice.
- Run samples at national research facilities and services including Diamond Light Source, ISIS Neutron and Muon Source and the National Crystallography Service.
- Act as a Radiation Protection Supervisor for the Crystallography Service, work closely with the Chemical Crystallography Service Manager and the Departmental Senior Radiation Protection Supervisor to ensure compliance with health and safety regulations.
- Comply with the Health and Safety requirements associated with the daily operations of the facility, contributing to risk assessments as appropriate.
- Maintain up-to-date statistics on the Analytical Service, including User data and KPI
 metrics, and report to the Chemical Crystallography Service Manager and Head of
 Inorganic Chemistry as required. Provide contributions for Departmental publications,
 and disseminate information about the Analytical Service as required.

Other

- Contribute to the Crystallographic community with the agreement of the Chemical Crystallography Service Manager.
- Carry out and publish original research work in collaboration with other staff and members of academic staff or with Part II students as appropriate and to further the development of the Service.

Selection criteria

Essential

- Education to doctorate level in a science subject with advanced study and experience in crystallography as applied to Chemistry.
- Advanced knowledge of crystallography analytical techniques and the credibility to train others and give advice to researchers at all career levels.
- A high-level understanding of crystallographic instrumentation and knowledge of its operation.
- Excellent sample handling skills, including experience of dealing with samples sensitive to air, moisture and solvent loss.
- A demonstrable service ethos and commitment to user engagement within a research environment.
- Ability to collaborate and build strong relationships with a wide range of people, including: students; academics and postdoctoral researchers; central University employees; other University departments; external academic and industrial partners; and the Chemistry Operations Team.
- Ability to work independently with a highly proactive approach. Ability to prioritise workload and to meet deadlines.
- Excellent written and oral communication skills, and an ability to explain complex technical material to a range of audiences.

Desirable

- Experience of working in a research facility within an educational or industrial setting including staff and financial management.
- Experience collecting and working with data collected at central facilities (synchrotron and neutron sources).
- Experience of working with Rigaku instrumentation, CrysAlisPRO software, and CRYSTALS refinement software suite.
- Experience of dealing with complex crystallographic problems and challenging diffraction data.
- Knowledge and/or experience of complementary techniques including for example, X-ray powder diffraction, Density Functional Theory, solid and solution-state NMR, Thermogravimetric Analysis, Differential Scanning Calorimetry, neutron scattering methods.

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 and we rank first in the UK for university spin-outs, and in recent years we have spun out 15-20 new companies every year. 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 Chemistry

The mission of Oxford Chemistry is to advance the global understanding of chemistry and to use that knowledge to address major challenges for society. Oxford Chemistry maintains world-class strengths in fundamental research, including the training of outstanding young scientists, whilst being an outward-looking department engaging with other disciplines, industry, public services, government and the general public. We are a large department within the University's Mathematical, Physical and Life Sciences Division with over 70 research groups and 900 researchers including 400 graduate research students. Our MChem degree takes 180 students a year and features the distinctive tutorials of Oxford, an innovative three-year programme of practical teaching within our state-of-the-art teaching laboratory, and a 4th year focused on research based within one of our research groups.

Research in Oxford Chemistry focuses on fundamental science aimed at making significant and sustained long-term impact. We provide an environment that enables research by hiring, developing, and supporting talented researchers, many recognised as international leaders, across the spectrum of the chemical sciences. Our students and staff work in excellent research facilities to deliver field-leading research that crosses traditional boundaries and engages strongly with other disciplines, both within Oxford and across a range of external sectors.

The impact of our research in the wider economy and society is manifest in our many industrial and clinical collaborations and successful start-ups. Our eight research themes and business engagements showcase the breadth and depth of our research across the chemical sciences.

We are committed to providing an inclusive and supportive work and study environment for all our staff and students based on core values of respect, equality and collaboration. We have held an Athena SWAN silver award since 2015 reflecting our commitment to improving gender equality within our discipline.

Oxford Chemistry is accommodated within five buildings in the University's science area, including a modern RIBA award-winning dedicated research facility and a state-of-the-art practical teaching laboratory. Researchers are supported by a research infrastructure within Chemistry that includes NMR, Mass Spectrometry, Crystallography, Surface Analysis, Inorganic Materials Characterisation, Advanced Electron Spin Resonance and high-performance computing facilities as well as access to facilities across the wider University and at national research facilities including the Rosalind Franklin Institute and Diamond Light Source.

To support the Teaching and Research in the Department, there are a number of administrative functions including Finance, Human Resources, Facilities, Information Technology, Student Administration, Health and Safety, Communications and Alumni Relations.

Find out more about the Department, our work and our people at chem.ox.ac.uk

Equality, Diversity and Inclusion in Oxford Chemistry

We are committed to promoting an inclusive and diverse community of students and staff based on core values of respect, equality and collaboration. The Department has an active Equality, Diversity and Inclusion (EDI) committee and since 2015 we have held an Athena SWAN silver award in recognition of our efforts to introduce organisational and cultural practices which promote gender equality and create a better working environment for all. We promote familyfriendly policies and support flexible working arrangements where possible. For more information about the University's family friendly benefits. please also see https://hr.admin.ox.ac.uk/information-for-parents-and-carers

Mathematical, Physical and Life Sciences Division

The academic administration of the University is conducted through four divisions (Humanities, Social Sciences, Mathematical, Physical and Life Sciences, and Medical Sciences). The Mathematical, Physical and Life Sciences Division consists of ten constituent departments: The Department of Chemistry, the Department of Computer Science, the Department of Earth Sciences, the Department of Engineering Science, the Department of Materials, Mathematical Institute, the Department of Physics, Department of Plant Sciences, Department of Zoology and the Department of Statistics. The division provides a framework for interdisciplinary teaching and research. There are also links with the Medical Sciences Division.

The disciplines within the MPLS Division regularly appear at the highest levels in rankings, including the Times Higher Education and QS world rankings. Nationally, the quality of the Division's research outputs and environment, and the resulting impact, was recognised through strong performances in the UK Research Excellence Framework in both 2014 and 2021.

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

How to apply

Applications are made through our online recruitment portal. Information about how to apply is available on our Jobs website https://www.jobs.ox.ac.uk/how-to-apply.

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

As part of your application you will be asked to provide details of two referees and indicate whether we can contact them now.

You will 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)

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

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

If you currently work for the University please note that:

- as part of the referencing process, we will contact your current department to confirm basic employment details including reason for leaving
- although employees may hold multiple part-time posts, they may not hold more than the equivalent of a full time post. If you are offered this post, and accepting it would take you over the equivalent of full-time hours, you will be expected to resign from, or reduce hours in, your other posts(s) before starting work in the new post.

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 department(s).

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-faqs

Non-technical questions about this job should be addressed to the recruiting department directly 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

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

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** of 30 September before the 70th 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: https://hr.admin.ox.ac.uk/the-ejra.

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 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, flexible working options, travel discounts including salary sacrifice schemes for bicycles and electric cars and other discounts. Staff can access a huge range of personal and professional development opportunities. See https://hr.admin.ox.ac.uk/staff-benefits

Employee Assistance Programme

As part of our wellbeing offering staff get free access to Health Assured, a confidential employee assistance programme, available 24/7 for 365 days a year. Find out more https://staff.admin.ox.ac.uk/health-assured-eap

University Club and sports facilities

Membership of the University Club is free for University staff. It 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 www.club.ox.ac.uk/. and https://www.sport.ox.ac.uk/.

Information for staff new to Oxford

If you are relocating to Oxfordshire from overseas or elsewhere in the UK, the University's Welcome Service includes practical information about settling in the area, including advice on relocation, accommodation, and local schools. See https://welcome.ox.ac.uk/

There is also a visa loan scheme to cover the costs of UK visa applications for staff and their dependants. See https://staffimmigration.admin.ox.ac.uk/visa-loan-scheme

Family-friendly benefits

We are a family-friendly employer with one of the most generous family leave schemes in the Higher Education sector (see https://hr.web.ox.ac.uk/family-leave). Our Childcare Services team provides guidance and support on childcare provision, and offers a range of high-quality childcare options at affordable prices for staff. In addition to 5 University nurseries, we partner with a number of local providers to offer in excess of 450 full time nursery places to our staff. Eligible parents are able to pay for childcare through salary sacrifice, further reducing costs. See https://childcare.admin.ox.ac.uk/.

Supporting disability and health-related issues (inc menopause)

We are committed to supporting members of staff with disabilities or long-term health conditions, including those experiencing negative effects of menopause. Information about the University's Staff Disability Advisor, is at https://edu.admin.ox.ac.uk/disability-support. For information about how we support those going through menopause see https://hr.admin.ox.ac.uk/menopause-guidance

Staff networks

The University has a number of staff networks including for research staff, BME staff, LGBT+ staff, disabled staff network and those going through menopause. Find out more at https://edu.admin.ox.ac.uk/networks

The University of Oxford Newcomers' Club

The University of Oxford Newcomers' Club is 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 www.newcomers.ox.ac.uk.

Research staff

The Researcher Hub supports all researchers on fixed-term contracts. They aim to help you settle in comfortably, make connections, grow as a person, extend your research expertise and approach your next career step with confidence. Find out more https://www.ox.ac.uk/research/support-researchers/researcher-hub

Oxford's Research Staff Society is a collective voice for our researchers. They also organise social and professional networking activities for researchers. Find out more https://www.ox.ac.uk/research/support-researchers/connecting-other-researchers/oxford-research-staff-society