

PARTICULARS OF APPOINTMENT

THE UNIVERSITY OF MANCHESTER

FACULTY OF SCIENCE & ENGINEERING

HENRY ROYCE INSTITUTE

NXCT FACILITY MANAGER AND PRINCIPAL INSTRUMENT SCIENTIST

VACANCY REF: SAE-016286

Salary: £52,559 to £62,727 per annum, depending on relevant experience

Hours: Full-time

Duration: Fixed-term of 4.5 years in the first instance

Location: University of Manchester, Oxford Road, Manchester with travel required within the UK on a regular basis

Responsible to: Head of Research Infrastructure & Facilities (Institutes), Faculty of Science & Engineering; Head of Operations, Henry Royce Institute

Enquiries about the vacancy, shortlisting and interviews:

Name: Dr. Timothy Burnett, NXCT Director

Email: timothy.burnett@manchester.ac.uk

Background

The National X-ray Computed Tomography (NXCT) is the [National Research Facility for lab-based X-ray computed tomography](#). We bring together world-leading capability in lab-based XCT from the universities of Manchester, Southampton, Warwick, University College London and Diamond Light Source. The NXCT Hub in Manchester is hosted by the [Henry Royce Institute](#) for advanced materials. In 2021, Royce will open a dedicated space on the second floor of the new, £105m Royce Hub Building to host a Data Visualisation and Analysis Support Centre to support new users.

As the UK's national research facility, we provide an unparalleled combination of 3D imaging facilities and data analysis, research knowledge and technical experience to support users that have never worked with X-ray scanning before and to help advanced users conduct exciting new experiments. Together, our five partners provide a unique and diverse shared capability to the UK. The NXCT will provide: access to state-of-the-art X-ray instruments; technical support for new and existing users; the expertise to design complex experiments; and the infrastructure and resources to analyse 3D and 4D data.

Overall purpose of the role:

The NXCT Facility Manager will work in partnership with the NXCT Directors to deliver and advance a world-class national research facility. As the technical and operational lead for the Facility, they will manage a team of technical and management staff to provide an exceptional service to our users and to ensure developments in the field of X-ray imaging are implemented within the facility for the benefit of the research community. This is an externally-facing and strategic role, with a key element being relationship building across the partner organisations, equipment suppliers, facility users, funders, and a broad range of stakeholders.

The post holder will combine significant technical expertise in X-ray imaging with proven operational and stakeholder management skills. They will be committed to demonstrating leadership in the application of best practice in equality, diversity and inclusion.

Key responsibilities, accountabilities or duties:

The NXCT is an evolving, dynamic organisation and the appointee will therefore be expected to demonstrate flexibility and adaptability to meet its developing needs. The indicative range of duties is expected to include, but is not limited to, the following:

Strategic planning, management and reporting

- With the Directors, be responsible for the delivery of the facility in accordance with the terms of the NXCT's contract with the EPSRC.
- Drive the development and execution of the facility's strategic and operational plans.
- Be responsible for reporting on the facility's KPIs and take management action as required to implement measures to ensure progress against plan.
- Develop and monitor risk maps for the delivery of the facility in line with the contract and ensure that suitable risk mitigation procedures are in place and regularly audited.
- Embed EDI in all aspects of the operation of the facility, leading by personal example.
- Be responsible to the Head of Operations for ensuring the facility conforms to all relevant legal, statutory and funder compliance.
- Deputise for the Directors as required, including at external meetings and conferences.

Technical leadership

- Be responsible for the technical delivery of the facility by overseeing the daily operation of the facility at the Hub and keeping abreast of activity across the spokes.
- Apply an in-depth knowledge of X-ray imaging techniques to work with users and technical teams in planning and conducting complex experiments.
- Keep at the forefront of X-ray tomography science to enable world-class science from users.
- Develop and oversee the delivery of technical training courses for users.
- Build and maintain close relationships with equipment manufacturers to jointly deliver technical developments to instruments.
- Be responsible to the Head of Research Infrastructure & Facilities for representing facility interests and requirements to the Estates Directorate, ensuring the facility is maintained to a high standard, and is fully compliant with all statutory responsibilities.

Facility management

- Provide operational leadership, including forecasting, budgeting and decision-making to ensure the optimal prioritisation and use of resources.
- Oversee the implementation of access procedures and models, and make adaptations to the service in response to changing user requirements.
- Draft policy and guidance documents, including in relation to data management and legal compliance.
- Prepare and present regular performance reports to the funder and facility stakeholders.
- Have oversight of the facility budget, leading on financial planning and reporting and being responsible for ensuring the facility is financially sustainable.
- Oversee the completion of the facility's TRAC costings for equipment access and other services, working in partnership with the Heads of Research Infrastructure and Facilities.
- Negotiate favourable maintenance contracts with suppliers.

Personnel management

- Lead a team of technical staff at the facility's hub.
- Be responsible for the line management of these staff, conducting PDRs and inductions and dealing with grievances and performance issues.
- Conduct workforce planning to ensure succession plans and continuity of service, making resourcing decisions and drafting business cases for resource as required.
- Coordinate recruitment exercises and implementation of other HR processes and procedures.

Communication and outreach

- Be responsible for effective internal communication and collaboration between staff at the Hub and at the spokes.
- Develop strong working relationships with colleagues in the Henry Royce Institute, Faculty and wider University, representing the facility at internal meetings.
- Actively promote the facility's capabilities and services at meetings, visits, workshops, conferences, seminars and other events.
- Seek out and develop new business opportunities with industry partners.
- Represent the facility and the Henry Royce Institute at external meetings.

Other

- Maintain confidentiality of information in line with data protection requirements and University and NXCT policies.
- Undertake the above duties in accordance with the requirements of the University's and NXCT's equality & diversity policies, health & safety policies, and their financial regulations.
- Assist the Directors in other aspects of the project as required, undertaking any other duties commensurate with the grade.

Essential Knowledge, Skills and Experience:

- Degree (or an equivalent qualification) in physical sciences, engineering or related discipline, or significant vocational experience in a scientific or research environment.
- Significant knowledge and practical research experience in the field of X-ray computed tomography.
- Track record of leadership at a senior level within a science and engineering research environment, and of contributing to the development of strategy and policy formation.
- Experience of managing a technical facility and of promoting services to a range of users.
- Experience of working on complex, multi-disciplinary projects with multiple partners, managing processes involving numerous stakeholders.
- Experience of contributing to research funding proposals.
- Understanding of the relevant regulatory requirements that apply to the facility's activity including for example, health and safety and export control.
- Finance management skills, with experience of budget management and the ability to interpret financial information.
- Strong understanding of the principles of full cost recovery analysis for facilities.
- Line management experience with a track record of impactful team development.
- Experience of creating a team to effectively deliver day-to-day operations of a technical facility.
- Ability to manage people through setting objectives, reviewing and managing performance.
- Excellent project management skills.
- Effective communication and interpersonal skills (both orally and written).
- An ability to network and build partnerships with a wide range of people at all levels.
- Experience of handling confidential information and communications sensitively.
- The ability to work strategically and to solve operational problems in a timely and balanced manner through the use of initiative and innovation.
- The ability to work accurately and precisely under pressure to deliver to strict deadlines.

Desirable Knowledge, Skills and Experience:

- Postgraduate degree in a relevant physical sciences or engineering discipline.
- A Project Management qualification.
- Experience of equipment procurement and the associated tendering processes.
- Experience of designing and/or building new experimental equipment.
- Understanding of state aid rules, including *de minimis* and GBER regulations.