Director of UK Astronomy Technology Centre and Head of Royal Observatory Edinburgh Site
Science and Technology Facilities Council
2024
About the UK Astronomy Technology Centre

The UK Astronomy Technology Centre (UK ATC) is the national centre of expertise for the design and delivery of astronomical instrumentation and works closely with UK University partners and international collaborators to design and build transformative and ground-breaking instrumentation and software for large astronomical observatories around the world. The UK ATC supports our astronomy community through design, construction (and exploitation) for astronomy and enables future science through:

a) research and development in instrumentation
b) maintaining facilities, expertise and talent in necessary professional engineering/technical areas with long-term career development for staff
c) helping to define the future programme together with UK and international partners

The UK ATC plays a key delivery role for STFC investment in the large astronomical facilities used by the UK community.

We currently have major construction roles for STFC in the European Southern Observatory instruments for the Extremely Large Telescope (ELT) and Very Large Telescope (VLT), in software for the Square Kilometer Array (SKA), and for the European Space Agency’s LISA mission, in a mixed portfolio that also includes smaller/short timescale projects with a variety of partners/stakeholders and applications of our technologies and skills to areas beyond astronomy. Our major projects are often on 10 year+ lifecycles and are multidisciplinary and international in nature, requiring close collaboration with international partners and stakeholders.

We have world-class test facilities to support STFC and UKSA funded instrument development, with vibration and test facilities for small satellites/components also made available through STFC’s Business Innovation Directorate for commercial use. Recently refurbished dedicated workshops support our instrumentation construction and an active programme of research into additive manufacturing of mirrors. The instrumentation project for the ELT is, without doubt, the most ambitious ever undertaken in ground-based optical/IR astronomy. The UK ATC has scientific and technical leadership roles in four of the planned first light instruments and works closely with STFC Programmes Directorate to coordinate the overall UK programme.

The UK ATC is a Department within STFC’s Science and Technology National Laboratories and has 120 staff, the majority of whom are highly skilled professional engineers working on a variety of projects in astronomy and providing the underpinning technical support for the business activity in the Higgs Centre for Innovation. Our 10 project scientists conduct a wide programme of research at the forefront of observational astronomy, alongside their main roles of providing the scientific expertise to our multi-disciplinary projects. Often exploiting the instruments that the UK ATC has developed, the main scientific interests of the project science
group cover star and planet formation, exoplanet characterisation, galactic archaeology and galaxy evolution. The group collaborates widely nationally and internationally in their astrophysics research.

The Department is also responsible for the national laboratories’ public engagement team with professional Public Engagement staff based across the Royal Observatory Edinburgh (ROE), Rutherford Appleton Laboratory (RAL) and Daresbury Laboratory (DL) sites delivering and supporting National Laboratories Departments in public engagement across the wide spectrum of physics and engineering in STFC. UK ATC scientists and engineers actively provide astronomy outreach activities within this broader National Labs programme.

About STFC and The National Laboratories

STFC is one of Europe’s largest research organisations, trusted to support, enable and undertake cutting-edge projects in a range of diverse fields.

As one of the nine bodies of UKRI, STFC’s research seeks to understand the universe from the largest astronomical scales to the tiniest constituents of matter, yet creates impact on a very tangible, human scale.

Our mission is to discover the secrets of the universe, to develop advanced technologies, and to innovate to solve real-world challenges.

STFC’s goals for the next three years are set out in our Strategic Delivery Plan 2022 – 2025. This covers new initiatives in our fundamental science programme, new investments in facilities in our National Laboratories, and our ambitions to grow our links to business and industry at our Research and Innovation campuses. The plan reflects the exciting opportunities for STFC to contribute towards delivering UKRI’s strategy and the scale of our investment that will provide the UK with a series of world leading capabilities through to 2050 and beyond.

The National Laboratories provide research facilities and capabilities that, because of their scale, complexity, strategic character or cost, are operated as a national research resource.

These facilities and capabilities include access for external users to neutron scattering and light source facilities, laser facilities, accelerator research facilities and high-performance computing. They also include national technical capabilities in:

- nuclear physics
- particle physics
- astronomy
- accelerator science
- instrumentation
- space technology

The primary mission of the laboratories is to facilitate national research capability, and they therefore complement and collaborate with the university research base.

National Laboratories consists of:
About the Royal Observatory Edinburgh (ROE)

The STFC ROE site is operated by UK ATC staff and STFC Estates Department staff under the leadership of the UK ATC Director. The site is shared with the University of Edinburgh’s Institute for Astronomy, who have approximately the same number of staff as the UK ATC. This mix of an academic institute alongside the UK ATC provides a dynamic and exciting astronomy focussed environment.

The Higgs Centre for Innovation is a joint initiative of STFC and Edinburgh University and provides shared facilities for the University/IfA, STFC/UK ATC, business incubation, and commercially suitable lab space. The STFC Business Innovations Directorate manage the business focussed activities.

A small number of staff from other STFC Departments are also based on the site and support the UK ATC programme.

The UK ATC provides a friendly and flexible environment on the beautiful ROE site, in the dynamic and attractive city of Edinburgh, combining a historic observatory with modern facilities.

About the Role

The Director will articulate a clear vision and strategy to guide the Department in its next phase of development. A collaborative leader, you will enable and guide the staff to succeed. The Director will have the sound financial management expertise and the leadership skills to operate at an international level and secure, implement and deliver large scale national and international projects in astronomy. As the Head of the ROE site, the Director will lead its strategic development and provide operational oversight.

Reporting to the Executive Director of National Laboratories Science and Technologies, the Director will lead the UK Astronomy Technology Centre and manage the Department’s budget assuring appropriate financial and risk management. They will collaborate with senior professionals in STFC and national and international astronomy institutes to enable the
delivery of the UK ATC programme and the safe operation of the Royal Observatory Edinburgh site, developing sustainable approaches to all aspects of this programme.

Candidates for this position will have demonstrated the ability to inspire and lead large complex teams, have a respected and consistent track record within the astronomy community, and be capable of providing strong visible and proactive scientific and technical leadership and direction to the Dept. and the ROE site. The successful candidate will also be responsible for developing and maintaining strategic partnerships externally with key national and international organisations to achieve shared objectives.

Key Accountabilities and responsibilities include:

**Strategic Leadership and Delivery:**
- Provide the UK ATC with long-term vision and strategic leadership, guiding its future science and technology development programme. Ensure strategic alignment with STFC mission and maintain an awareness of and participation in global science strategy processes for astronomy.
- Provide leadership focus for and facilitate the STFC National Laboratories Public Engagement programme. Actively support/create opportunity to demonstrate socio-economic benefits of the science programme in astronomy.
- Work closely on STFC’s behalf with the wider UK and international astronomy community and external partners (ESO, SKAO, ESA, NASA, UKSA and others) in strategic planning, co-ordination and scientific/technical investment decisions for astronomy.
- Working in collaboration with other department Director's support and drive staff performance and development opportunities, and continuously improve standards to achieve STFC objectives.

**Estate Management:**
- As Head of Site for ROE, taking oversight responsibility for SHE matters, and acting as figurehead and senior host/contact and Officer in Charge. Work closely with STFC Estates and STFC Executive to lead and prioritise the site development strategy, requirements, utilisation and opportunities.

**Budget, Resource Management and Delivery:**
- Responsible for achieving targets for all research and development work of the UK ATC within allocated budgets and for securing the appropriate staff resources. Oversee the delivery of multiple projects including balancing resources, planning, and budget management across the programme. Manage the department's budget to meet the agreed deliverables and implement ROE site operations whilst maintaining an acceptable risk position.
- Visibly delivering STFC’s corporate vision and implementation of its Delivery Plan by maintaining UK ATC’s world-leading reputation for its work on astronomy programme.

**Collaboration and Engagement:**
- Maintain scientific influence and leadership internationally and nationally in astronomy by sustaining suitable personal scientific participation.
• Ensure an excellent working relationship with the University of Edinburgh & Institute for Astronomy, ROE Trust and Scottish stakeholders (Government, Scottish Universities Physics Alliance (SUPA), etc). Visible representation of STFC in Scotland.
• Work across the organisation to encourage cross-department collaborations and support the broader STFC goals. Support the Executive Director of National Laboratories Science and Technology to further enhance STFC’s performance and reputation, including through active membership of relevant STFC Boards.
• Interface as necessary with Government Ministers, senior civil servants, Heads of International Agencies, CEOs, HEI Vice Chancellors, other Research Councils and other relevant national and international bodies and institutes.

Values:
• As a leader demonstrate personal commitment to STFC’s vision, values and strategic objectives, championing equality and diversity principles, ensuing that they are integrated into all aspects of our business and with a commitment to sustainability.

Travel:
• Undertake frequent national and international travel in order to maintain a visible presence across sites and at key decision-making fora.

Your Skills and Experience

We understand that individuals might hesitate to submit an application if they don’t meet every one of the criteria below. If you're enthusiastic about joining our organisation and possess a majority of the desired skills or experience, we encourage you to proceed with an application. We recognise that a variety of perspectives, backgrounds, and experiences enriches our work environment and therefore actively welcome applications from a diverse range of candidates.

Candidates will be assessed against the following criteria throughout the recruitment process:

• Your track record of achievement in observational astronomy or space science with a network of international connections and experience of leadership at senior levels in the community. Experience in developing associated instrumentation and/or leading programmes of similar complexity.
• Excellent communicator with proven skills in motivating, utilising and developing capability across a diverse team of technical and scientific staff, building trust and teamwork.
• Strong interpersonal skills, with demonstrated ability to influence, build and maintain strong working relationships with a wide range of stakeholders in a collaborative and consultative approach.
• Familiarity with the organisation and delivery of multi-national instrument consortia as well as knowledge/experience of the consensus building and political processes that lead to priorities for new ground-based observatories, instruments and astronomy space missions in the UK and internationally.
• Experience of developing and delivering strategy including resource planning, operational delivery and pursuing and delivering major projects. Experience in staff management, allocating resources and handling a budget.
• Ability to make difficult decisions balancing conflicting priorities and agendas of all stakeholders with well-developed mediation and problem-solving abilities.
Terms of Appointment

**Contract Type:** Open-ended (permanent) role

**Salary:** from £87,565 – £99,000 per annum, depending on skills and experience

**Hours:** Full time. We support flexible working, and we would encourage applicants to have a conversation with us to discuss FTE and flexible/compressed hours

**Location:** Royal Observatory Edinburgh

**Additional Conditions:** We anticipate that by applying for this position, applicants are willing to travel regularly in the UK and overseas

Benefits

STFC offers a benefits package designed to provide an excellent work/life balance including 30 days’ annual leave plus public holidays, flexible working hours, exceptional pension scheme and social and sporting activities and societies. Please visit our [benefits page](#) for more information.

At STFC, we are a very creative, collaborative and friendly team where people are encouraged to learn new skills and expertise. It takes a wide range of skills to put together teams of people to deliver our programmes, and as such everyone is valued for their input regardless of their role in the organisation.

Timescales and Selection

The selection process will consist of an interview and presentation. Interviews will be held at the UK ATC in Edinburgh. It is anticipated that there will just be one stage. *Please note, dates and details may change.*

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<th>Process</th>
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<tr>
<td>Closing date</td>
<td>Monday 1 April 2024</td>
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<tr>
<td>Panel interviews</td>
<td>Thursday 25 April 2024</td>
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<td>Panel Shortlisting</td>
<td>w/c 8 April 2024</td>
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<td>Start date</td>
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How to Apply

Please submit your application via our [Careers Portal by 23:59 on Monday 1 April 2024.](#)

**You will need to supply:**

- A curriculum vitae (up to two pages)
- A supporting statement (no more than four pages)

**Your supporting statement should:**

- Cover how you meet the criteria listed under the person specification
- Be tailored to the role and your outline vision for the UK ATC for the next ten years

Please note, failure to provide a supporting statement *(referred to on our Careers Portal as a cover letter)*, or failure to address the above points may result in your application not being considered further. Please note, you will only be assessed on the content of your CV and supporting statement, and not the ‘experience’ section of the application.

Prospective applicants are encouraged to informally discuss the role and work of the UK ATC with the current Director, Professor Gillian Wright (*Gillian.Wright@stfc.ac.uk*)

Please note, to apply via the UKRI Careers Portal you will receive a notification confirming your profile has successfully been created (if you have not previously set up an account) and a second notification confirming your application for this role has been submitted. If you do not receive the second notification confirming your application for this role has been submitted or experience any other issues applying, please contact seniorrecruitment@ukri.org, so we can ensure your application has been received.

**Equality, Diversity and Inclusion**

The UK ATC is committed to sustaining a diverse and inclusive workforce. Staff with technical and engineering skills are supported to develop and progress on the basis of their technical expertise and delivering the engineering excellence that enables world class astronomical research. We are invested in creating an environment that is welcoming and supportive of all, to help us achieve the highest possible standards in our work and organisation together. In this regard, we have a pro-active staff led ED&I working group and encourage applications from under-represented groups.

As a [Disability Confident Leader](#), UKRI will offer interviews to disabled candidates who meet the published minimum requirements for a job or role. Whether you choose to apply under the
Disability Confident scheme or not, you can still ask us to make particular adjustments for you when attending an interview.

We know actions speak louder than words. For further information, please visit the UKRI web page: ‘How we support EDI in the workforce’

Pre-employment screening

To enable us to hire the very best people and to safeguard our people, our assets and our important role we will conduct a comprehensive pre-employment check on successful applicants as part of the recruitment process.

UKRI supports research in areas that include animal health, agriculture and food security, and bioscience for health which includes research on animals, genetic modification, and stem cell research. Whilst you may not have direct involvement in this type of research, you should consider how this aligns with your personal values or beliefs. Our pre-employment requirements include a security check and an extreme organisation’s affiliation check.

As part of the recruitment process, the successful candidate will also be required to register their Declarations of Interest.

The Seven Principles of Public Life

In 1995, the Committee on Standards in Public Life defined seven principles, which should underpin the actions of all who serve the public in any way.

Consistent with the Commissioner’s Code of Practice, applicants will be assessed on merit, and all candidates will need to uphold the standards of conduct set out in the Seven Principles of Public Life in addition to the UKRI Code of Conduct, which are:

**Selflessness**
Holders of Public Office should take decisions solely in terms of the public interest. They should not do so in order to gain financial or other material benefits for themselves, their family, or other friends.

**Integrity**
Holders of public office should not place themselves under any financial or other obligation to outside individuals or organisations that might influence them in the performance of their official duties.

**Objectivity**
Carrying out public business, including making public appointments, awarding contracts, or recommending individuals for rewards and benefits, holders of public office should make choices on merit.

**Accountability**
Holders of public office are accountable for their decisions and actions to the public and must submit themselves to whatever scrutiny is appropriate to their office.
Openness
Holders of public office should be as open as possible about all the decisions and actions that they take. They should give reasons for their decisions and restrict information only when the wider public interest clearly demands.

Honesty
Holders of public office have a duty to declare any private interests relating to their public duties and to take steps to resolve any conflicts arising in a way that protects the public interest.

Leadership
Holders of public office should promote and support these principles by leadership and example.

Complaints Procedure
If you feel you have reason to complain, you should direct your concerns in the first instance to the Senior Appointments team (SeniorRecruitment@ukri.org) who will make every effort to deal with this and respond to you within 48 hours.

If your complaint is not dealt with satisfactorily, you can find information about the steps you can take under UKRI Complaints Procedure.