



Job Title:	Surrey Future Fellow (Level 5)
Responsible to:	Head of Section, or Principal Investigator
Responsible for:	Responsibility for staff within own research group
Job Summary and Purpose	
To plan and deliver research in accordance with the specified research project. To contribute to securing funding for own research projects and for projects for those staff under their direct supervision.	
Main Responsibilities/Activities	
<ul style="list-style-type: none"> • To contribute to the development of the research of the Faculty, by planning and carrying out research activity within a specified area, often in collaboration with colleagues. • To take a significant role in planning, co-ordinating and implementing research programmes and, where appropriate, commercial and consultancy activities. To take lead responsibility for a small research project or identified parts of a large project. This may include planning fieldwork, data analysis and evaluation and laboratory experimentation. To make decisions about research programmes and methodologies, often in collaboration with colleagues, and to resolve the problems of meeting research objectives and deadlines. • To develop new concepts and ideas to extend intellectual understanding. Assess, interpret and evaluate the outcomes of research, and develop ideas for the application of research outcomes. To take a role in the regular publication of results in appropriate journals, in giving presentations at national and/or international conferences, and in other outputs as required and/or appropriate. • To develop innovative research proposals (as a self-contained item or as part of a broader programme), identifying sources of funding, submitting funding bids, and gaining positive reviews for these. Promoting own area of research. • Continually to update knowledge and develop skills. To extend, transform and apply knowledge acquired from scholarship to research and appropriate external activities. • To carry out management and administrative tasks associated with specified research funding, including managing and developing staff within their projects; risk assessment of project activities; organisation of project meetings and documentation; management of resources, preparation of annual reports, and management or monitoring of research budgets. To oversee and implement procedures required to ensure accurate and timely formal reporting and financial control. 	



- To undertake liaison with external organisations including equipment manufacturers, steering committees, associated academic facilities and commercial users.
- To contribute to teaching within the Faculty by carrying out student supervision, demonstrating or lecturing duties, and convening modules within the post holder's area of expertise. May be required to contribute to the supervision of research students.

Person Specification

The post holder must have:

- Normally a doctoral degree in a relevant discipline, with a high level of competence and independent standing in research.
- They will be externally (normally nationally) recognised within their area of discipline, publishing in recognised appropriate journals and attracting research funding for their own work or for other staff within the research group.

Relationships and Contacts

The post holder may have a key responsibility to the principal investigator, with prime responsibility for reporting and liaison with external funding bodies or sponsors. As a senior member of the project team, the post holder will also supervise the activities of research and technician staff within the particular research group

Special Requirements

To be available to participate in fieldwork as required by the specified research project.

All staff are expected to:

- Positively support equality of opportunity and equity of treatment to colleagues and students in accordance with the University of Surrey Equal Opportunities policy.
- Help maintain a safe working environment by:
 - Attending training in Health and Safety requirements as necessary, both on appointment and as changes in duties and techniques demand
 - Following local codes of safe working practices and the University of Surrey Health and Safety Policy
- Undertake such other duties within the scope of the post as may be requested by your Manager.



Addendum to Role Profile	
Job Title:	Surrey Future FAUST Fellow

<p>Job Summary and Purpose:</p> <p><u>The post holder will be expected to:</u></p> <p>Support the development of an advanced silicon detection array, as part of the UKRI-STFC-funded FAUST project, to be used at the world’s premier radioactive beams facility, FRIB, in the USA. The Fellowship is designed to provide highly talented ECRs with the opportunity to lead the construction and commissioning of the next generation of nuclear physics detection systems for reaction studies, as well as the ability to build their own independent research programme.</p>
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<p>Main Responsibilities/Activities</p> <p>Context</p> <p>The Nuclear Physics Group at the University of Surrey has long established itself as a world leader in nuclear physics research. The group consists of 9 academic staff, several research fellows, and a number of research-active emeritus staff, covering many areas of both experimental and theoretical nuclear physics. Recently, however, the Nuclear Physics Group at Surrey has expanded its experimental activities in reaction studies and nuclear astrophysics, to match the exceptional advancements made in radioactive ion beam technology worldwide. This initiative has been extremely successful and Surrey is now host to the UK’s flagship £3.4M nuclear physics project, FAUST. The FAUST project focuses on the development and construction of an advanced silicon detection system backed with CsI crystals to be placed inside the world-leading GRETA g-ray tracking array, and used in conjunction with the S800 recoil spectrometer. This unique combination of devices will allow for multiple direct reactions to be studied using the vast swathe of intense rare isotope beams now available at the recently opened, FRIB facility. Specifically, FAUST will enable investigations of weak <i>r</i>-process reactions in Type-II supernovae, <i>rp</i>-process reactions in X-ray bursts, nuclear structure around islands of inversion, and the evolution of shell structure towards the neutron dripline.</p> <p>Surrey Future FAUST Fellow</p> <p>We are looking for outstanding candidates to take a leading role in the development of the FAUST silicon detector array and strengthen Surrey’s role in shaping the future direction of nuclear science. In particular, the Nuclear Physics Group at Surrey has thrived through a wide range of collaborative endeavours both internally and internationally, and, as such, the post holder will be expected to consolidate and expand such links to best realise the full potential of the FAUST project. Furthermore, through development of the FAUST array and involvement in wider nuclear physics activities at Surrey, the post holder will be expected (with support) to develop their own independent research programme. Here, the strong link between experimental research and nuclear theory at Surrey, with potential to extend interactions to other subject areas, such as the recently formed astrophysics group, provides an excellent basis upon which to build an ambitious and exciting programme of activity.</p>
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The creation of this new position is part of a faculty-wide strategy to strengthen Nuclear Physics at Surrey, in line with the recent investment of the UK Science and Technology Facilities Council (STFC) in the FAUST project. Consequently, we are looking for research proposals from applicants in the fields of experimental nuclear structure physics and experimental nuclear astrophysics. As part of their application, candidates are required to submit a 2-page research statement outlining their fit to the role and a personal vision for the research topic of their choice at Surrey.

Overarching Role Responsibilities on the Programme

- The Surrey Future FAUST Fellow will support the development, construction and commissioning of an advanced silicon detection array to be used at FRIB in the USA.
- The Surrey Future FAUST Fellow will manage and develop the programme of research proposed in their application.
- The Surrey Future FAUST Fellow will be expected (with support) to apply for external sources of funding over the course of the fellowship to allow them to strengthen their research programme and to develop as independent research leaders.
- All Fellows are expected to present their findings at conferences and workshops, and publish their research outcomes in high-ranking journals,
- All Fellows are expected to be attentive to the possibilities for delivering impact from their research.
- The successful candidate will contribute to the academic life of the University, engaging with relevant staff and students, and take part in research seminars, workshops and meetings. Where appropriate, Fellows will be invited to contribute to undergraduate and postgraduate teaching, along with supervision of dissertation projects and PhD supervision.
- The Surrey Future FAUST Fellow will attend the wider Surrey Future Fellow cohort meetings and development events.

Person Specification

The post holder must have:

- Achieved a PhD in physics or other physics-related discipline or will shortly be awarded a PhD.

The post holder should have:

- Created original, inspirational, and realistic nuclear physics research proposals.
- An excellent track record in research (e.g. high-quality publications, and evidence of actual/potential ability in external research grant income generation).
- Motivated, led and inspired themselves and others to achieve their best.
- Interest in managing and delivering every aspect of a research programme.
- A growing reputation both within and outside of your current institution for research innovation and collaboration.



Relationships and Contacts

The Fellow will interact with colleagues in the Nuclear Physics Group, the School of Maths and Physics and the Faculty of Engineering and Physical Sciences. They will also engage regularly with their cohort of Fellows and will regularly access professional services infrastructure across the university for support and development.