

Post Details		Last Updated: 02/07/2026	
Faculty/Administrative/Service Department	Faculty of Engineering and Physical Sciences School of Mathematics and Physics		
Job Title	Radiation Physics Laboratory Manager		
Job Family	Technical and Experimental	Job Level	3
Responsible to	School Technical Manager		
Responsible for (Staff)	n/a		

Job Purpose Statement

To take responsibility for the day-to-day management of the Radiation Physics Laboratories, specifically with regards to ensuring the technical aspects of undergraduate and postgraduate teaching delivery are fully addressed and directing Radiation Health and Safety within these laboratories. This also includes training students and postgraduates in the use of complex equipment and maintaining current safety regulations and good laboratory practice. They will act as Radiation Protection Supervisor for the Radiation Teaching Laboratory with responsibility for security, inventory and location of all the University's sealed radioactive sources and nuclear materials, issues of School dosimeter badges, and the calibration and maintenance of School radiation detector monitors, whilst ensuring the University's compliance with relevant regulations in all cases.

Key Responsibilities This document is not designed to be a list of all tasks undertaken but an outline record of the main responsibilities (5 to 8 maximum)

1. Management and specifically radiation Health and Safety Management of the relevant Physics laboratories.
2. Take responsibility for the safe and secure storage of the radioactive sources (approx. 200) and nuclear material held by the University as well as other sources held within the School of Mathematics and Physics. Ensuring precise and accurate record keeping, and secure procedures for them in compliance with current regulatory legislation and general guidelines. Duties include the ordering, issuing and receiving of all sealed radioactive sources and Nuclear Materials for the University.
3. Forward plan purchases of radioactive sources and maintain and develop a disposal programme to ensure regulatory compliance.
4. Act as an ionising radiation expert for internal and external enquiries.
5. Maintenance of equipment and apparatus, including shared research equipment within the Radiation Teaching Laboratory. Ensuring all Radiation Teaching laboratories are safe working environments prior to use.
6. Directing other members of the technical team to ensure teaching responsibilities are fulfilled in a timely manner and deputising as required for the School Technical Manager.
7. Train undergraduate and postgraduate students in the safe use of equipment and the correct methods of carrying out experiments particularly when using radioactive and harmful substances. Supervise students carrying out teaching lab experiments. Ensure that students are aware of relevant paperwork, protocols, and follow correct procedures. Provide technical training support for postgraduate students and staff undertaking research work. To include full inductions, technical advice, experimental design support, training and assistance in the application of techniques and use of facilities and equipment within the labs.
8. Prepare protocols and risk assessments for Radiation Teaching lab experiments, ensuring legislative compliance. Prepare contingency action plans, ensure they are rehearsed regularly and prepare reports on incidents.

N.B. The above list is not exhaustive.

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.
- Work to achieve the aims of our Environmental Policy and promote awareness to colleagues and students.
- Follow University/School policies and working practices in ensuring that no breaches of information security result from their actions.
- Ensure they are aware of and abide by all relevant University Regulations and Policies relevant to the role.
- Undertake such other duties within the scope of the post as may be requested by your Manager.
- Work supportively with colleagues, operating in a collegiate manner at all times.

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.

Elements of the Role

This section outlines some of the key elements of the role, which allow this role to be evaluated within the University's structure. It provides an overview of what is expected from the post holder in the day-to-day operation of the role.

Planning and Organising

- The post holder will organise and prioritise their work within an established operating environment, but without close line management supervision, with some guidance and direction from the Technical Manager.
- They will have the latitude within their working routine to use their specialist technical knowledge to organise and prioritise their own work, to ensure that key deadlines and objectives are met, particularly regarding regulatory timelines and teaching commitments. This will include successfully managing any conflicting demands, possessing a basic awareness of the options available and being able to make effective and appropriate decisions, referring only to their line manager where appropriate.
- Forward plan purchases of radioactive sources and maintain and develop a disposal programme to ensure regulatory compliance.
- Prepare protocols and risk assessments for Radiation Teaching lab experiments, ensuring legislative compliance. Prepare contingency action plans, ensure they are rehearsed regularly and prepare reports on incidents.
- They will be responsible for the monitoring, purchasing and control of teaching equipment and laboratory consumables & chemical supplies. Planning for such will be based on their judgement, technical expertise and prior experience.
- The post holder will liaise with Estates & Facilities management to co-ordinate any works or projects in the laboratories to ensure the best continuity of service is provided to lab users.

Problem Solving and Decision Making

- The post holder will collaborate with other technical and academic staff to design and contribute to the progress of research and undergraduate projects.
- The post holder will apply their diagnostic skills, using their technical experience and best practice, during the periodic maintenance of equipment in the laboratories, and while liaising with service engineers regarding repairs, as part of ensuring that equipment availability is maintained at optimal levels. This particularly important when solutions are required for technical problems within a teaching session. Due to the complex nature of the experimental equipment, they should find resolutions, including further advice from line management where they judge this to be appropriate.
- The post holder will be required to successfully manage any conflicting demands on their time, possess a reasonable awareness of the options available, and be able to make effective and appropriate decisions (referring to their line manager where appropriate).
- This role may require the post holder's specialist radiation expertise to respond to out of hours queries. As such, experience and knowledge is required to decide on an appropriate response at that time.

Continuous Improvement

- The post holder will be expected to acquire and/or refresh their knowledge of radiation legislation and regulations to ensure their understanding is up to date, as well as more general Health and Safety legislation.
- The post holder will be expected to acquire and/or refresh their skills on the teaching and shared research kit for which they have responsibility.
- The above will be achieved by a variety of means but will include seeking and attending specialised training courses and scientific meetings, as well as keeping up to date with technical literature.
- There is an expectation that the post holder will proactively work to widen their skill base once they are established in the role.
- It is expected that the post holder will apply their skills and knowledge to make recommendations for improvements to the efficiency and effectiveness of the service offered. At times they will be expected to take a creative approach to their work.

Accountability

- The post holder will act as a Radiation Protection Supervisor (RPS), ensuring precise and accurate record keeping, and secure procedures in compliance with current legislation and general guidelines. (IRR17, EPR2016, NSR19). The post holder is expected to keep abreast of changes in legislation through information supplied to them and to respond to changes in relevant regulations, liaising closely with the University Radiation Protection Officer. Compliance is placed under scrutiny by regular inspection by the Environment agency, Office for Nuclear Regulation, HSE, Counter Terrorism Security Advisors with support visits by the University's appointed Radiation Protection Advisor.
- Take responsibility for the safe and secure storage of the radioactive sources (approx. 200) and nuclear material held by the University as well as other sources held within the School of Mathematics and Physics. Ensuring precise and accurate record keeping, and secure procedures for them in compliance with current regulatory legislation and general guidelines. Duties include the ordering, issuing and receiving of all sealed radioactive sources and Nuclear Materials for the University.
- They will respond confidently and in a timely manner to ensure the best continuity of service is provided to lab users, both for teaching and research.
- The post holder will ensure that all students, staff and visitors are appropriately trained to work efficiently and safely in the Radiation Teaching laboratories, operate equipment and perform specialist procedures.

- They will ensure, as far as they have authority to do so, that all activity in the laboratories will be done safely in line with local & University policy and will report any concerns to their line manager and/or the Health & Safety office.

Dimensions of the role

- The postholder will be responsible for managing the school's radiation teaching laboratories, including the issuing and receiving of radioactive sources and maintenance of equipment and apparatus. The post holder will need to demonstrate a good level of verbal and written communication, as they are expected to write laboratory protocols and complete documentation such as risk assessments and legal records. They will need an awareness of any timescales for documentation completion as set out within the regulations, to ensure compliance. The post holder is responsible for the safe and secure storage of the University's radioactive sealed sources (approximately 200) and Nuclear Materials, as well as other radioactive sources held by the School, ensuring precise and accurate record keeping, and secure procedures in compliance with current legislation and general guidelines. The post holder is expected to keep abreast of changes in legislation through information supplied to them and to respond to changes in relevant regulations.
- They will assist the University Radiation Protection Officer in providing the necessary evidence of the School's and University's compliance with relevant Legislation and presenting evidence of such during inspection visits.
- The post holder should be aware of budgeting constraints, in consultation with the technical manager, for the purchase of radioactive sources, safe disposals and equipment to maintain continuity of service.
- The post holder is also expected to have an in-depth knowledge of Chemical procedures and the handling of hazardous substances undertaken within the laboratories.

Supplementary Information

- The post holder is key to supporting the teaching within both undergraduate and postgraduate radiation physics lab classes. As part of this, good organisational and communication skills and the ability to respond to, and balance, the demands of staff, students are key to success within the role.
- Research equipment has and will continue to be move into the lab meaning the post holder will be more involved with research work.

Person Specification This section describes the sum total of knowledge, experience & competence required by the post holder that is necessary for standard acceptable performance in carrying out this role.

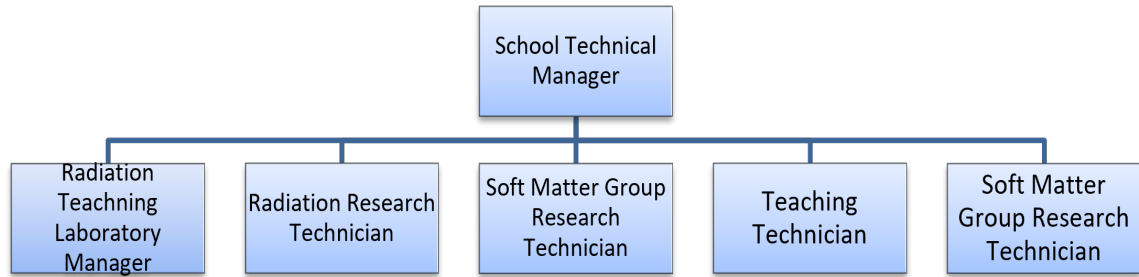
Qualifications and Professional Memberships

Degree, HND, NVQ 4 qualified or equivalent qualification in Physics, or a related discipline, plus several years relevant experience.	E
Post graduate qualification in a related discipline.	D

Technical Competencies (Experience and Knowledge) This section contains the level of competency required to carry out the role (please refer to the Competency Framework for clarification where needed and the Job Matching Guidance).	Essential/ Desirable	Level 1-3
Ability to work independently and confidently with minimal supervision	E	3
Good interpersonal skills and flexibility. The ability to interact with staff/students at all levels	E	2
Knowledge of Radiation Regulations (IRR17, EPR 2016, NSR19).	E	3
Experience of safe handling of sealed/unsealed radiation sources	E	3
Competent with the principle of Radiation Physics and associated equipment	E	3
Knowledge of chemical procedures and handling hazardous substance	E	2
Experience of managing, working in a supervisory capacity, or in an organising role in a laboratory or suite of laboratories.	E	2
An understanding of health & safety requirements and procedures	E	2
Good technical problem-solving skills	E	2
Willingness to undertake continued development & training	E	3

Special Requirements:	Essential/ Desirable
Willingness to attend Radiation Protection Supervisors course.	E
The post holder should not have any medical condition which is affected by radiation.	E
The post holder must have manual handling skills and the ability to move and lift heavy objects.	E
Core Competencies This section contains the level of competency required to carry out this role. (Please refer to the competency framework for clarification where needed). n/a (not applicable) should be placed, where the competency is not a requirement of the grade.	Level 1-3
Communication Adaptability / Flexibility Customer/Client service and support Planning and Organising Continuous Improvement Problem Solving and Decision Making Skills Managing and Developing Performance Creative and Analytical Thinking Influencing, Persuasion and Negotiation Skills Strategic Thinking & Leadership	3 2 3 3 2 2 1 2 2 2
This Job Purpose reflects the core activities of the post. As the School/Faculty and the post holder develop, there will inevitably be some changes to the duties for which the post is responsible, and possibly to the emphasis of the post itself. The University expects that the post holder will recognise this and will adopt a flexible approach to work. This could include undertaking relevant training where necessary.	
Should significant changes to the Job Purpose become necessary, the post holder will be consulted and the changes reflected in a revised Job Purpose.	
Organisational/School Information & Key Relationships	
Background Information The post holder will have the opportunity to work in a very varied role, including supporting interesting research projects, as well as Teaching Laboratory classes. Due to the breadth of responsibilities, they will have the opportunity to gain and utilise diverse skills.	

School Structure Chart



Relationships

Internal

- School technical staff, primarily the School Technical Manager and Radiation Research Technician
- Nuclear Physics, and Radiation and Medical group academic research staff and students
- Undergraduate and postgraduate taught students
- Health & Safety Office personnel & Faculty safety advisors
- Estates & Facilities Management staff, Campus Safety operatives

External

- University's Radiation Protection Advisor
- Representatives of Legislative bodies during inspection visits (EA, ONS, CTSA, HSE, UKHSA)
- External clients
- Laboratory suppliers & equipment manufacturers
- Maintenance & repair engineers