**Job Description**

**Job Title: Research Associate in Superconducting RF Engineering (Cockcroft Institute)**

**Salary Range and Conditions: Grade 7, 24 month appointment**

**Department/Division: Engineering**

**Reports To: Graeme Burt**

**About us:**

**Job Purpose**

1. Measurement of properties on thin film SRF coatings using RF or magnetic fields
2. Surface analysis of thin films and coatings
3. Analysis and interpretation of measurement results
4. Design and upgrade of SRF measurement facilities

**Main Responsibilities**

1. Measure the RF performance of superconducting cavities at cryogenic temperatures
2. Magnetic field penetration studies of thin film SRF samples
3. Operation of vacuum, cryogenic and RF components and equipment
4. Electromagnetic modelling and design of RF cavities and ancillaries
5. Design of mechanical supports and thermal links in cryogenic systems
6. Analyse measurement results over many different measurements and interpret in the context of superconducting theory
7. Support PhD students working on superconductivity
8. Design and implement upgrades of the RF and magnetic field measurement apparatus
9. Publication in peer-reviewed journals
10. Give talks at conferences, collaboration meetings and workshops
11. Liaise with the thin-film deposition team in STFC

**People management:** As a people manager, you will be expected to actively support the wellbeing and development of your team. This includes conducting regular Performance and Development Reviews (PDRs) and providing ongoing guidance to help staff achieve their full potential. You will also be responsible for managing performance, ensuring clear expectations are set and met, and fostering a positive and supportive work environment.

**Job Hazards/Safety-Critical Duties and required Pre-employment Checks:** Working in a radiation test facility, working with cryogens, working with pressurised gasses

**Physical Demands:** Lifting RF cavities weighing 10-20 kg

**Values:** The University recognises and celebrates good employment practice undertaken to address all inequality in higher education whilst promoting the importance and wellbeing for all our colleagues.

We expect all staff to embrace our core values and work positively to support equality, diversity, and inclusion, ensuring that every team member contributes to a supportive, and respectful working environment.

Find out what it's like to [work at Lancaster University](https://www.lancaster.ac.uk/jobs), including information on our wide range of employee benefits, support networks and our policies and facilities for a family-friendly workplace.