

JOB DESCRIPTION

Job Title:	Senior Research Fellow in Low Temperature Group
Department / Unit:	Physics
Job type	Professional Services
Grade:	8
Accountable to:	Prof John Saunders
Accountable for:	
Purpose of the Post	
To undertake research in the London Low Temperature Laboratory at RHUL to fulfil milestones and deliverables of Horizon 2020 research grant, European Microkelvin Platform. This research may be in liaison with another member of staff, but the post holder should be able to take full responsibility for the design and execution of studies.	
Key Tasks	
• Operation of low temperature equipment as necessary. • Operation of microwave RF equipment as necessary. • Work on the EMP joint research activities: – JRA1: Enhancing Milli and Microkelvin Access and the Advance to the Nanokelvin Regime – JRA2: Establishing New Thermometry Standards for Milli- and Microkelvin Temperatures – JRA3: Exploiting Quantum Technology to Provide Ultrasensitive Measurement Capacity – JRA4: Advancing Nanoscience Capabilities at Ultralow Temperatures – JRA5: Enabling Technology for Probing Quantum Materials at the Lowest Temperatures • Research collaboration with scientists within the EMP • To analyse data and interpret any results obtained • To ensure the validity and reliability of data at all times • To maintain accurate and complete records of all findings • To produce and document the results of such studies • To write reports for submission to research sponsors • To present findings to colleagues and at conferences • To draft and contribute to publications for submission to refereed journals • To provide guidance to staff and students	

- To attend relevant workshops and conferences as necessary
- To take part in the supervision of postgraduate students
- To take initiatives in the planning of research
- To promote the reputation of the Group, the Department and the College

Other Duties

- To undertake appropriate administration tasks
- To attend relevant meetings
- To undertake any necessary training and/or development
- To undertake specific safety responsibilities relevant to individual roles, as set out in the College procedures
- Maintain safe workplace practice and procedures in accordance with the requirements of Health and Safety legislation
- Maintain an up to date knowledge of relevant statutory Health and Safety legislation and recommendations and attend safety training as required
- To observe and comply with all College policies and regulations

The duties listed are not exhaustive and may be varied from time to time as dictated by the changing needs of the College. The post holder will be expected to undertake other duties as appropriate and as requested by his/her manager.

The post holder may be required to work at any of the locations at which the business of Royal Holloway is conducted.

Internal and external relationships

The following list is not exhaustive but the post holder will be required to liaise with:
The Low Temperature Group and the EMP

PERSON SPECIFICATION

Details on the qualifications, experience, skills, knowledge and abilities that are needed to fulfil this role are set out below.

Job Title: Senior Research Fellow in Low Temperature Group

Department: Physics

	Essential	Desirable	Tested by Application Form/Interview/Test
Knowledge, Education, Qualifications and Training			
PhD in experimental condensed matter physics.	x		Application form
Prior training in cryogenics	x		Application form / interview
Experience of working in industry in a research capacity		x	Application form
Skills and Abilities			
Computer programming skills (e.g., Python, C++, Labview)	x		Application form / interview
Ability to communicate verbally and in writing	x		Application form / interview
Ability to teach/demonstrate research techniques and methodologies	x		Application form / interview
Experience			
Experience in performing experiments at low temperatures.	x		Application form / interview
Experience in the design and testing of experimental cells for low temperature experiments.	x		Application form / interview
Clean room / sample preparation experience		x	Application form / interview
Evidence of international networking	x		Application form / interview
Evidence of production of high quality research outputs (conference papers, publications)	x		Application form / interview

Experience in performing experiments using RF	x		Application form / interview
Other requirements			
Ability to work in a collaborative team	x		Application form / interview
Willingness to travel for short term work at another EMP access site if required.	x		Application form / interview
Experience of supervising undergraduate students	x		Application form / interview
Willingness to engage in knowledge transfer and outreach	x		Application form / interview