

JOB DESCRIPTION

Job Title:	Postdoctoral Research Assistant in Superconducting
	Quantum Devices
Department / Unit:	Physics
Grade:	RHUL7
Accountable to:	Prof Phil Meeson
Accountable for:	
Purpage of the Post	

Purpose of the Post

This full-time position is part of the European Metrology Programme research grant "Parawave", a consortium of National Metrology Institutes (NPL, PTB, INRIM) and Universities (RHUL, Lancaster) focusing on the creation of a new type of superconducting parametric quantum limited microwave amplifier. The post will be based at RHUL where the project is led by Prof Phil Meeson.

The post is for 24 months in the first instance. The project will involve all aspects of design, nanofabrication and investigation of performance of a quantum limited parametric amplifier. The successful candidate will be expected to contribute to all aspects of the research group and the collaboration.

Eligible applicants will hold a PhD in Physics with preference given to those with a track record in experimental superconducting quantum device research, including superconducting quantum device modelling and design, nanofabrication and milliKelvin RF measurement.

Key Tasks

To work as part of the Superconducting Quantum Devices research group with a focus on the creation, successful operation and testing of a quantum limited Josephson travelling wave parametric amplifier. To fulfil the purposes of the research grant award.

To lead aspects of device design, fabrication and testing. To provide training to PhD students in the research group.

To contribute to and write technical reports and drafts of research publications based on results of research. To engage with members of the research group, the Parawave consortium and the wider scientific community. To keep the P.I. informed of project progress. To contribute to research grant proposals.

To maintain a high quality laboratory environment, including contributing to the teaching of final year undergraduate projects.

Other Duties

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, and where the business of the Parawave consortium is conducted, including partner research laboratories and at scientific conferences.

Internal and external relationships

The following list is not exhaustive but the post holder will be required to liaise with:

All members of the Parawave consortium.

Technical, administrative and academic staff within the Physics Department. External commercial suppliers.

The wider scientific community, including for knowledge exchange and dissemination of scientific advances.