

## JOB DESCRIPTION

Job Title:	Post-Doctoral Research Assistant in Low Temperature
	Physics
Department / Unit:	Physics
Job type	Professional Services
Grade:	RHUL 7
Accountable to:	Dr Xavier Rojas
Accountable for:	N/A

#### Purpose of the Post

To undertake research in Superfluid Optomechanics at RHUL to fulfil milestones and deliverables of STFC research grant: 'Quantum Simulator for Fundamental Physics'. This research may be in liaison with another member of staff, but the post holder will take full responsibility for the design and execution of studies.

#### Key Tasks

Study and design of superfluid-based cavity optomechanical devices for applications in quantum science and technology. This activity involves nanofabrication, cryogenic operations, experimental instrumentation, and data acquisition and analysis. This activity requires the capacity to spend time away at other (national and international) institutions and facilities to meet specific project aims.

The study of superfluid optomechanics experiments on the dilution refrigerator located in the shielded room of the London Low Temperature Laboratory.

- Operation of low temperature equipment as necessary
- 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 the initiative in the planning of research
- To promote the reputation of the Group, the Department and the College.

# 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.

- 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

### Internal and external relationships

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

- Members of the Low Temperature group
- Technical and academic staff within the Physics Department
- External commercial suppliers
- The wider scientific community, including for knowledge exchange and dissemination of scientific advances