

Senior Scientist / Higher Scientist

Permanent contract job openings in Superconducting Quantum Computing and Quantum Circuits.

Applications are invited for job openings at the National Physical Laboratory (NPL) for the development of theoretical algorithms, software and machine learning based models for quantum computers. This is an opportunity for motivated individuals to join NPL's Quantum Technologies Department to work in the Quantum Computing Circuits group in Teddington (hybrid working model). The work will be done in collaboration with leading quantum computing companies and Universities.

As a Senior Scientist / Higher Scientist you will be focused on the development and metrology of superconducting qubits and processors whilst helping to shape the future research directions of the team. You will have access to state-of-the-art cryogenics and measurement instrumentation and work in a new purpose-built laboratory.

The role will involve:

- Delivery of projects focused on the design, fabrication and testing of superconducting quantum circuits, in particular qubits.
- Design and measurement of superconducting qubits, at mK temperatures.
- Research and development of new state-of-the-art measurement capabilities.
- Write and publish articles for publication in leading scientific journals.

Senior scientists are also expected to:

- Provide technical leadership to junior colleagues and PhD students.
- Formulate future research directions.
- Work with and supporting academic and industrial partners and help meet their measurement challenges.
- Help to manage projects, writing of scientific proposals etc.

The role will require expertise in measurements of single- and multi-qubit circuits as well as a good understanding of the underlying physics and engineering.

At NPL you will be able to engage in a range of projects in quantum metrology, quantum computing and quantum sensing and as a Senior Scientist you will have opportunities to shape and expand your future research portfolio.

About You

You will have the following skills, experience and qualifications:

- PhD in physics, electrical engineering or similar.
- Experience measuring qubits in solid-state systems.
- Knowledge of electronics and electrical measurement techniques with a focus on RF/MW measurements.
- Proficiency in Python or a similar high-level programming language.

- Strong communication and presentation skills in English, both written and spoken.

Additional beneficial skills

- Practical experience of design, measurement, and characterisation of superconducting quantum circuits.
- A record of publications in the relevant fields.
- Experience of supervision of junior colleagues and/or PhD students.
- Experience of formulating research direction, e.g., writing research proposals.

Application notes :

These roles are being advertised across multiple zones. Offer and salary will be dependent on experience.

Applications will be reviewed, and interviews conducted throughout the duration of this advert therefore we may at any time bring the closing date forward. We encourage all interested applicants to apply as soon as practical.

If you are applying for this position and you have been displaced by the Ukrainian crisis, please apply and email careers@npl.co.uk or text 07976873073 highlighting you are applying under the "We support Ukraine" initiative - [Ukraine employment support - NPL](#)

APPLY HERE: <https://jobs.npl.co.uk/vacancies/1687/senior--higher-scientist--superconducting-quantum-computing.html>