

Electronics Engineer in Quantum Device Engineering

Department of Physics and Astronomy

University of Sussex - School of Mathematical and Physical Sciences

Full time, fixed term initially 18 months, with possibility of becoming a permanent role

Salary range: starting at £32,548 and rising to £38,833 per annum

Expected start date: September 2018 or as soon as possible thereafter

Applications are invited for an Electronics Engineer in the Ion Trap Cavity-QED and Molecular Physics Group which is part of the Sussex Centre for Quantum Technologies at the University of Sussex. The position is part of the UK National Quantum Technologies programme. The Ion Trap Cavity-QED and Molecular Physics Group is one of the world's leading centres for quantum technologies with trapped-ion such as quantum networking, and quantum sensing. The group has collaborations with multiple leading industry players as well as with universities and other research facilities around the world.

The successful development of quantum technologies is set to revolutionise the world we live in. Specially developed electronic sub-systems are a core part of these technologies and are currently being developed at the Ion Trap Cavity-QED and Molecular Physics Group as part of their major effort to construct a portable atomic clock system. The successful applicant will work as part of a team and in collaboration with external industry partners to design, build and test core sub-systems which will be used to control various parts of the system. Furthermore, the successful applicant will work with our industry partners to transform these systems into marketable products.

Key responsibilities:

- Formulate and analyse high level requirements to develop engineering solutions.
- Prepare system level designs for new product developments.
- Create detailed engineering work plans and requirements/specifications.
- Provide detailed electrical & electronic engineering designs to meet project requirements directly, or, via others, and meet project timescales.
- Ensure that designs are properly verified according to engineering procedures and comply with relevant regulatory standards.
- Build and test prototypes and assist in the development of marketable products.

Key relevant skills and knowledge:

- Normally educated in Electronics Engineering or equivalent. A PhD is not required.
- Experience in electronic/electrical engineering.
- Experience developing rf and dc electronic circuits.
- Experience in the designing of PCB's.
- Experience in microcontroller programming.

- Able to develop prototypes and concepts.
- Good understanding of general engineering, design and assessment practices.
- Competent with test equipment.
- A hands-on and highly motivated engineer.
- Works effectively as part of a team.
- Ability to engage and network with a wide range of stakeholders.

The position is located on the beautiful University of Sussex campus just outside of Brighton. The city of Brighton & Hove has everything - sun, sea, brilliant clubs, great places to eat, fabulous shops, a truly cosmopolitan vibe and is located only 50min from central London. Located on the beach, Brighton boasts beautiful seaside views and beaches, boating, sports and beach activities. The South Downs provide breath-taking views, tranquil walks and plenty of opportunities for mountain biking, hiking or picnics.

For further information please contact Prof Matthias Keller
Phone: +44 (1273) 877673, email: M.K.Keller@sussex.ac.uk

Please include with your completed application form a CV, at least two references and a list of relevant publications.

The University of Sussex is committed to equality of opportunity.

For full details and how to apply see our vacancies page

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