JOB DESCRIPTION

Vacancy Ref: A2809

<table>
<thead>
<tr>
<th>Job Title:</th>
<th>Senior Research Associate in Semiconductor Devices</th>
<th>Present Grade: 7</th>
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</thead>
<tbody>
<tr>
<td>Department/College:</td>
<td>Physics</td>
<td></td>
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<tr>
<td>Directly responsible to:</td>
<td>Prof. Rob Young</td>
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<td>Supervisory responsibility for:</td>
<td>n/a</td>
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</tbody>
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Other contacts

**Internal**: Departmental academic staff, knowledge exchange staff, administrators, technicians, researchers and students.

**Head of Department**: Prof. Roger Jones (Physics)

**External**: Collaborative commercial partner, Quantum Base.

**Major Duties:**

- Develop semiconductor devices and integrated circuits for novel physical security devices.
- Lead a sub-team to work with representatives from Quantum Base to define and agree overall system performance requirements, explore their development needs and opportunities, and identify how their own expertise needs to be involved in delivering solutions.
- Design, set-up and conduct high quality scientific experiments in laboratories using equipment within the Physics Department and Quantum Technology Centre, for which full training will be provided.
- Preparation of instrumentation equipment and samples, which may include documenting procedures prior-to, during and post-testing.
- Lead the production of written reports detailing work that has been carried out, including assumptions, justifications, conclusions and any recommendations related to agreed outputs with clients. This includes handover of material to private sector beneficiaries and collaborators to allow for further product development.
- Publishing results from studies in high impact scientific journals, white papers and patents.
- Contribute to the maintenance and upkeep of specialist equipment.
- Undertake international travel to present results at conferences and meetings with collaborators.
- Undertake any other duties appropriate to the grade of the post as required by Academic Staff, the Physics Technologist, Head of Department or external partners.