**JOB DESCRIPTION**

Research Associate in Semiconductor materials and devices  
Vacancy Ref: A3290

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<th>Job Title:</th>
<th>Research Associate in semiconductor materials and devices</th>
<th>Present Grade:</th>
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<tr>
<td>Department/College:</td>
<td>Physics</td>
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**Directly responsible to:** Dr Qiandong Zhuang

**Supervisory responsibility for:** Co-supervision of PhD students

**Other contacts**

**Internal:** Members of Dr Zhuang’s research group and other academic staff in QTC

**External:** A range of outside collaborators from EPSRC and EU funded projects.

**Major Duties:**

To conduct MBE growth and device processing of semiconductor nanowire based quantum materials on silicon and type II quantum materials to produce advanced mid-infrared photodetectors and lasers.

**In particular, the post holder will be expected to:-**

1. Take responsibility for day to day project management.
2. To fabricate semiconductor devices of infrared emitters
3. To conduct MBE growth of type II quantum materials
4. To characterize the semiconductor materials
5. To examine performance of light emitter devices
6. Participate the consortium meetings of the project
7. Participate in national and international conferences, presenting the results of the project and learning about current advances in the field.
8. Generally help with the running of the research group, including: supervision of new/junior members of the group and PG students.