

JOB DESCRIPTION

Vacancy Ref: A2773

Job Title:	Research Associate in resonant cavity and superlattice infrared photodetectors	Present Grade: 6
Department/College:	Physics Department	
Directly responsible to:	Dr Andrew Marshall	
Supervisory responsibility for:	Some supervision of summer interns	
Other contacts		
Internal: Dr A. Marshall and other research colleagues within the Physics Department, including Researchers, PhD students and summer students working within Dr Marshall’s group.		
External: Members of collaborating and funding organizations, in particular Amethyst Research Ltd and DSTL.		
Major Duties:		
<div>1. Design and modelling of resonant cavity infrared detectors.</div> <div>2. Growth of infrared detectors by Molecular Beam Epitaxy using antimonide alloys including InGaAsSb, AlAsSb, InAsSb and InAs/InAsSb superlattices.</div> <div>3. Characterisation of the structural and optical properties of grown epilayers.</div> <div>4. Cleanroom fabrication of infrared superlattice detectors.</div> <div>5. Temperature dependent opto-electrical characterisation of the detectors fabricated.</div> <div>6. Report writing and presentation of results at progress meetings and occasionally at relevant international/national conferences.</div>		