JOB DESCRIPTION
Vacancy Ref: A3496

Job Title: Research Associate in Terahertz waveguides for particle acceleration – simulation and design (Cockcroft Institute)	**Salary:** Grade 6P
Department/College:	Engineering
Directly responsible to:	Dr Rosa Letizia & Prof Graeme Burt
Supervisory responsibility for:	

Other contacts
Internal:
All Lancaster Cockcroft staff and students

External:
Cockcroft Institute academic and post-doctoral staff, PhD students, professional engineering, scientific and technical staff at STFC Daresbury Laboratory.

Major Duties

To take a leading role on the design and optimisation of THz and optical frequency structures, both dielectric and metallic, for charged particle acceleration.

This will include:

- Performing electromagnetic and particle interaction modelling for THz and optical frequency structures.
- Carry out simulation and physical design associated with manufacture of structures.
- Assist with experimental studies in the characterisation of manufactured dielectric and metallic structures.
- Taking a leading role in the electromagnetic simulation tasks for the multi-disciplinary experiments in THz and optical frequency driven particle beam acceleration.
- Contribute and lead publication of results in peer reviewed journals.
- Work with PhD students undertaking research within the THz acceleration programme
- Liaise with collaborators at ASTeC, Manchester & Liverpool
- Present results at appropriate conferences

Other Duties

Perform administrative duties related to the Cockcroft Institute education programme.