

Candidate Information

Position:	Technician (Electronic Workshop)
School/Department:	Centre for Wireless Innovation
Reference:	19/107468
Closing Date:	Monday 3 June 2019
Salary:	£24,028 - £27,831 per annum (potential to progress to £29,514 per annum through sustained exceptional contribution)
Anticipated Interview Date:	Tuesday 25 June 2019

JOB PURPOSE:

To provide specialist technical services in support of research and teaching projects.

MAJOR DUTIES:

1. Manufacture and assembly of microwave prototype circuits to a high level of accuracy, using hybrid assembly techniques.
2. Programming and operation of microwave measurement instruments, including spectrum analyser, vector network analyser, anechoic chamber, signal sources and high frequency oscilloscopes.
3. Provide detailed technical information, guidance and support to relevant staff as appropriate within the workshop in the development, construction and modification of microwave through sub-millimetre wave assemblies and apparatus using the following specialist techniques: manual and/or automatic surface mount component placement, precision soldering..
4. Procure and set- up specialised equipment and apparatus for use by academics, postdoctoral researchers and students in practical experiments. Construction and assembly of apparatus in house & off-site, if required.
5. Prepare and carry out procedures for tests/experiments and collate record and tabulate data for interpretation, e.g. the preparation of reports.
6. Maintain, test, fault finding, and repair equipment/apparatus to ensure it is safe to use and complies with relevant statutory safety regulations. Ensure general workshop services tidiness and best practice in connector handling including developing custom documentation.
7. Allocation of tasks to technical staff if required to do so and follow up to ensure work is completed to required standards and timescales.
8. Compliance with Health and Safety procedures affecting self and others.
9. Any other duties which are appropriate to the post as may be reasonably requested by the supervisor/line manager.

Planning and Organising:

1. Prioritise own work within a general plan to meet deadlines.
2. Plan layout of the laboratory as well as assessing requirements and resources needed in advance.

Resource Management Responsibilities:

1. Take delegated responsibility for ensuring instrument connectors and cables are fit for purpose prior/post to measurement.
2. Allocate/delegate work to others for specific activities.
3. Support student learning through the development and demonstration of standard equipment and techniques.
4. Where appropriate carryout some training of junior staff.

Internal and External Relationships:

1. Daily contact with work colleagues, academic staff and students.
2. Liaison with external contacts when required.
3. Regular liaison with supervisor/line manager.

ESSENTIAL CRITERIA:

1. OND/ONC and/or NVQ level 3 in Electrical Engineering (or equivalent) discipline and/or Apprenticeship in a microwave industrial / academic environment
2. Three years relevant work experience to include high frequency electronics, fabrication and test of microwave assemblies to include experience in the following specialist techniques; manual and/or automatic surface mount component placement: precision soldering; RF measurement using Vector Network Analysers, Spectrum analysers, signal sources and high frequency oscilloscopes.
3. Experience of training staff/students on routine fabrication and measurement techniques.
4. Project and time management skills, gained through carrying out a range of tasks to time and quality requirements with minimal direct supervision.
5. Must be able to develop best practice laboratory documentation.
6. Well developed understanding of relevant regulations and procedures including Health and Safety requirements.
7. Good communication and interpersonal skills.
8. Ability to develop and demonstrate standard procedures processes and techniques in relation to engineering laboratory practice.
9. Ability to prioritise own work within a general plan to meet deadlines.
10. Independent problem solving skills.
11. Must be willing to additional hours during peak periods needed. Occasional travel to partner sites or specialised offsite training.

DESIRABLE CRITERIA:

1. Experience of antenna measurement, nearfield or farfield.
2. Experience of on-chip measurement.
3. Experience of PCB manufacturing techniques, wet etching/milling.
4. Experience of therosonic wire bonding such as wedge and ball bonding.
5. Practical experience of electronic equipment repair and maintenance.
6. Willingness to work in a team as well as own initiative.