ROLE PROFILE

Job Title: Research Fellow

School/Department: Faculty of Engineering

Job Family and Level: R&T Level 4

Contract Status: This post will be offered on a fixed term contract basis, available from 1 April 2019 for a period of 9 months.

Hours of Work: Full time, 36.25 hours

Location: Jubilee Campus

Reporting to: Prof. Richard Leach

Purpose of the New Role:

The post holder will undertake research and development work in support of a project which aims to develop a scattering method for measuring rough surface texture in a manufacturing process.

Main Responsibilities

1. To carry out research and development of a All-optical Dimensional Measurement System
2. To plan and conduct research using recognised approaches, methodologies and techniques within the research area.
3. To analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights to research area.
4. To write up research work for publication and/or contribute to the dissemination at national/international conferences, resulting in successful research outputs.
5. To identify opportunities and assist in writing bids for research grant applications. Prepare proposals and applications to both external and/or internal bodies for funding, contractual or accreditation purposes.
6. To build relationships with both internal and external contacts in order to exchange information, to form relationships for future collaborations and identify potential sources of funds and/or opportunities for collaboration.
7. To co-ordinate the operational aspect of research networks, for example, arranging meetings and updating websites, etc. and contribute to collaborative decision making with colleagues in area of research.
8. To provide support, guidance and supervision to other staff, where appropriate in own area of expertise.
9. To supervise undergraduate and/or postgraduate students projects and placements, as appropriate. To participate in the assessment of student knowledge and co-supervise projects at Masters level.
10. To collaborate with academic colleagues on areas of shared interest for example, course development, collaborative or joint research projects.
11. To plan and manage own research activity and resolve problems, if required, in meeting own/team research objectives and deadlines in collaboration with others.
12. To utilise and contribute to organising research resources and facilities, laboratories and workshops as appropriate.
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<th>Knowledge, Skills, Qualifications &amp; Experience</th>
<th>Essential</th>
<th>Desirable</th>
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<tr>
<td>Qualifications/Education</td>
<td>PhD (pending or awarded) in Physics or Engineering subject</td>
<td>Skills in optics and mechanical instrument development.</td>
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| Skills/Training | Specialist research skills and techniques to include understanding of all of the following:  
- Photogrammetry theory and testing  
- Coherence scanning interferometry  
- Mechanical metrology frame design  
- Control software | Mechanical design |
| | Excellent oral and written communication skills, including the ability to communicate with clarity on complex information. | |
| | High analytical ability to analyse and illuminate data, interprets reports, evaluate and criticise texts and bring new insights. | |
| | Ability to creatively apply relevant research approaches, models, techniques and methods. | |
| | Ability to build relationships and collaborate with others, both internally and externally. | |
| Experience | Experimental use of optics. Metrology instrument design and testing.  
Some practical experience of applying the specialist skills and approaches and techniques required for the role.  
Experience in use of research methodologies and techniques to work within area. | Experience of developing new approaches, models, techniques or methods in research area. |
| Statutory/Legal | | |
| Additional Information | The role will require travel within the UK to project partner sites and occasional overseas travel. | |