



Job title	Research Associate / Fellow in Optical Metrology	Job family and level	Research and Teaching Level 4a / Training Grade / Level 4
School/ Department	Faculty of Engineering – Advanced Manufacturing Research Group	Location	Advanced Manufacturing Building, Jubilee Campus

Purpose of role

The research fellow will conduct research into data-driven surface metrology. This will include in-process measurement applications. It is essential that the candidate has a track record of working with industrial partners.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	To carry out research into industrial data-driven surface metrology for advanced manufacturing applications. To plan and conduct research using recognised approaches, methodologies and techniques within the research area.	40%
2	To write up research work for publication and/or contribute to the dissemination at national/international conferences, resulting in successful research outputs.	30%
3	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.	10%
4	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.	5%
5	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%
6	To utilise and contribute to organising research resources and facilities, laboratories and workshops as appropriate.	5%

Person specification

	Essential	Desirable
Skills	<p>Specialist research skills and techniques to include understanding of any of the following:</p> <ul style="list-style-type: none"> • Surface texture data analysis • Development of fast mathematical algorithms for data analysis <p>Excellent oral and written communication skills, including the ability to communicate with clarity on complex information.</p> <p>Ability to creatively apply relevant research approaches, models, techniques and methods.</p> <p>Ability to build relationships and collaborate with others, both internally and externally.</p> <p>Strong skills in optics</p>	<p>Track record of publication in surface texture characterisation</p>
Knowledge and experience	<p>Surface metrology experience</p> <p>Some practical experience of applying the specialist skills and approaches and techniques required for the role</p>	<p>Experience of developing new approaches, models, techniques or methods in research area.</p> <p>A track record of working with industrial partners.</p>
Qualifications, certification and training (relevant to role)	<p>PhD or about to obtain (or equivalent) in Engineering or Physics</p>	<p>PhD (or equivalent) in Engineering or Physics</p>



The University strongly endorses Athena SWAN principles, with commitment from all levels of the organisation in furthering women's careers. It is our mission to ensure equal opportunity, best working practices and fair policies for all.

Expectations and behaviours

The University has developed a clear set of core expectations and behaviours that our people should be demonstrating in their work, and as ambassadors of the University's strategy, vision and values. The following are essential to the role:

- Valuing people** Is always equitable and fair and works with integrity. Proactively looks for ways to develop the team and is comfortable providing clarity by explaining the rationale behind decisions.
- Taking ownership** Is highly self-aware, looking for ways to improve, both taking on board and offering constructive feedback. Inspires others to take accountability for their own areas.
- Forward thinking** Driven to question the status quo and explore new ideas, supporting the team to "lead the way" in terms of know-how and learning.
- Professional pride** Sets the bar high with quality systems and control measures in place. Demands high standards of others identifying and addressing any gaps to enhance the overall performance.
- Always inclusive** Ensures accessibility to the wider community, actively encouraging inclusion and seeking to involve others. Ensures others always consider the wider context when sharing information making full use of networks and connections.

Key relationships with others

