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| Job title | Research Fellow in Advanced Manufacturing | Job family and level | Research & Teaching Level 4 |
| School/ Department | Faculty of Engineering | Location | Jubilee Campus, Nottingham. |

Purpose of role

This post will focus on advancing the state-of-the-art in powder feedstocks for additive manufacturing. The candidate will explore innovative methods for improving powder properties and characterise them appropriately. They will conduct high quality research suitable for high-impact publication, and be expected to liaise with academic and industrial collaborators. The candidate will play a key role in the ACEL group and contribute to student supervision.

| | Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role) | % time per year |
|---|--|------------------------|
| 1 | To successfully deliver the MAPP project to a high standard. This involves taking responsibility for research direction and being self-sufficient. To conduct research to an excellent standard suitable for publication in high impact journals. Disseminate these findings and write reports of the results. | 50% |
| 2 | To develop new and innovate research methodologies. | 15% |
| 3 | Help in the management of group projects, including meeting organisation, report preparation etc. | 15% |
| 4 | Help supervise postgraduate and undergraduate research students engaged in their research. | 10% |
| 5 | Any other duties appropriate to the grade and role. | 10% |

Person specification

| | Essential | Desirable |
|--|--|---|
| Skills | <ul style="list-style-type: none"> ▪ Excellent communication and presentation skills. ▪ Ability to work in a team to deadlines and to prioritise tasks. ▪ Self-motivated. | <ul style="list-style-type: none"> ▪ Ability to quickly respond to change research demands. ▪ Independent decision maker. |
| Knowledge and experience | <ul style="list-style-type: none"> ▪ Experience in manipulating properties and behaviour of engineering materials. ▪ Experience in high-impact journal paper publication. ▪ Knowledge of materials characterisation methods, such as EBSD, XRD, SEM, etc. ▪ Knowledge of surface characterisation techniques, including Alicona and image processing. ▪ Expertise in surface engineering. | <ul style="list-style-type: none"> ▪ Experience in electrochemical and electron beam based surface modification methods. ▪ Experience in operation of SEM, XRD, EBSD and FIB etc. ▪ Experience in delivering presentations at workshops or conference. ▪ Research management and ability to lead projects. ▪ Proven team working/leadership. |
| Qualifications, certification and training (relevant to role) | <ul style="list-style-type: none"> ▪ Undergraduate or Masters Degree in physics, chemistry or engineering. ▪ PhD in an engineering discipline. | |



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

