



Job title	Research Associate/Fellow in Additive Manufacturing of Silicones	Job family and level	Research Level 4 (Appointment will be Level 4 Career training grade where an appointment is made before PhD has been completed)
School/ Department	Engineering - Centre for Additive Manufacturing	Location	Jubilee Campus, Advanced Manufacturing Building

Purpose of role

The role will support the Investigator team in achieving the Programme Grant’s overall research objectives by conducting research to enable us to additively manufacture facial prostheses that more accurately reflect the colour and tones of users.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	To plan and conduct research using established approaches, methodologies and techniques within the research area and support the development of improved methodologies to enhance the projects goals	30
2	To analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights to research area.	35
3	To contribute to writing up research findings for publication.	7
4	To assist with the preparations, proposals and applications to both external and/or internal bodies for funding, contractual or accreditation purposes.	7
5	To build internal and/or external contacts to develop knowledge and understanding, forming relationships for future collaborations.	3
6	To assist in the operational aspect of research networks, for example, supporting research meetings and updating databases etc and contribute to collaborative decision making with colleagues in area of research.	3
7	To provide guidance as required to support staff and students, where appropriate in own area of expertise.	5
8	To plan and manage own research activity and resolve problems, if required, in meeting own/team research objectives and deadlines in collaboration with others.	10

Person specification

	Essential	Desirable
Skills	<ul style="list-style-type: none"> ▪ Excellent oral and written communication skills, including the ability to communicate with clarity on complex information. ▪ Analytical ability to facilitate conceptual thinking, innovation, and creativity. ▪ Effective laboratory note-taking and logging of experiments and data. ▪ Ability for independent research within the context of a team. 	<ul style="list-style-type: none"> ▪ Ability to prioritise and organise resource requirements and deploy effectively. ▪ Ability to foster a research culture and commitment to learn in others. ▪ Strong analytical ability to analyse and illuminate data, interpret reports, evaluate and criticise texts and bring new insights. ▪ Experimental methods and analysis techniques relating to material and structural performance.
Knowledge and experience	<ul style="list-style-type: none"> ▪ Understanding of silicone-based chemistries ▪ Knowledge of methods (inc. experimental) for printing silicone materials ▪ Understanding of Inkjet Printing ▪ Experience of working in a multidisciplinary team. ▪ Demonstrated creativity and leadership in problem solving. ▪ Experience in the operation, maintenance and protocol development for 3D printing. ▪ Demonstrable skills (in the form of published work and PhD thesis) in Additive Manufacturing systems or similar. 	<ul style="list-style-type: none"> ▪ Knowledge of polymer materials ▪ Experience of working and analysing large datasets ▪ Liaising with external partners. ▪ Knowledge of reactive ink jet based additive manufacturing ▪ Experience in material or binder jetting ▪ Knowledge and background in the integration of mechanical and electronic systems (mechatronics).
Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> ▪ PhD (or about to obtain) in Engineering or Physical Sciences 	<ul style="list-style-type: none"> ▪ Training in health and safety/risk assessment.



As part of this, we welcome a diverse population to join our work force and therefore encourage applicants from all communities, particularly those whose protected characteristics under the Equality Act 2010, are not well-presented in our current staff body.



The University is a signatory of the Declaration on Research Assessment (DORA). As such we commit to focus on the scientific content of publications (where requested or provided as part of the recruitment and selection process) as a basis for review of quality, and consideration of value and impact of research conducted, rather than any proxy measures such as Journal Impact Factor.

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 friendly, engaging and receptive, putting others at ease. Actively listens to others and goes out of way to ensure people feel valued, developed and supported.
- Taking ownership** Is clear on what needs to be done encouraging others to take ownership. Takes action when required, being mindful of important aspects such as Health & Safety, Equality, Diversity & Inclusion, and other considerations.
- Forward thinking** Drives the development, sharing and implementation of new ideas and improvements to support strategic objectives. Engages others in the improvement process.
- Professional pride** Is professional in approach and style, setting an example to others; strives to demonstrate excellence through development of self, others and effective working practices.
- Always inclusive** Builds effective working relationships, recognising and including the contribution of others; promotes inclusion and inclusive practices within own work area.

Key relationships with others

