

JOB DESCRIPTION
Vacancy Ref: A3467-R

Job Title: Research Associate	Grade: 6
Duration:	
Department/College: Lancaster Institute for the Contemporary Arts	
Directly responsible to: Dr Adam Blaney (Project Principal Investigator)	
Supervisory responsibility for N/A	
<p>Other contacts:</p> <ul style="list-style-type: none"> - Internal: Colleagues and students in ImaginationLancaster, Lancaster Institute for the Contemporary Arts and the Faculty of Arts and Social Sciences, together with colleagues in other faculties, the Library, ISS, central administration, and other relevant university actors. - External: UKRI, professional bodies, employers, business organisations, local and UK government organisations, community groups, academic and research networks. 	
<p>Job purpose:</p> <p>The purpose of this research position is to work with the research team, through iterative -physical, digital and material prototyping, which will investigate and develop physically adaptive textile samples for sportswear. Textile coatings that can change state will be adapted based on sensor data and user interactions to modulate stimuli using an existing prototype set-up. In doing so, novel design and fabrication approaches will be developed that question and address issues of material waste/sustainability, redundancy and the future of physically adaptive structures.</p>	
<p>Major Duties:</p> <ul style="list-style-type: none"> - Support with the testing and documentation of novel material abilities via photography and videography to generate outputs, to a high standard, that can be widely shared - Develop strategies for analysing and evaluating variations between physical material properties generated and sensor/user-defined digital patterns. - Iteratively collaborate with chemistry, and our industry partner, to determine and develop material properties for textile coatings that can be adapted, using an existing prototype set-up, by modulating stimuli. - Desirable to be familiar with programming and hardware (processing and hardware) to fine-tune the existing prototype, but not essential. - Apply digital fabrication and computer-aided design to develop user interface prototypes. - To work with the PI and CoI to develop the project and a strategy to evaluate the demonstrator prototype via weekly discussions based on iterative prototyping/testing. - To ensure completion of project deliverables in an organised and timely manner. - To participate and organise project meetings as well as meetings with external partners. Tasks to include preparation and presentation of talks and active participation in discussions. - To author or co-author academic articles and other publications arising out of the project (e.g. posters, demonstrations, pictorials, journal articles). - To communicate research to a wide audience. - For an overview on previous work related to this role please see the link: http://imagination.lancaster.ac.uk/update/developing-reprogrammable-matter/ 	