

# Job Description and Person Specification

## JOB DESCRIPTION

Post title:	<b>Research Fellow in Materials</b>		
School/Department:	Electronics and Computer Science		
Faculty:	Faculty of Engineering and Physical Sciences		
Career Pathway:	Education, Research and Enterprise (ERE)	Level:	4
*ERE category:	Research pathway		
Posts responsible to:	Project Principal Investigator		
Posts responsible for:	None		
Post base:	Office-based/Non Office-based (see job hazard analysis)		

Job purpose
To undertake research in accordance with the specified research project under the supervision of the award holder. To undertake leadership, management and engagement activities.

Key accountabilities/primary responsibilities	% Time
1. To conduct research associated with the funded project, with the focus on the new material development for wearable E-textiles applications (e.g. healthcare).	60 %
2. Regularly disseminate findings by taking the lead in preparing publication materials for referred journals, presenting results at conferences, or exhibiting work at other appropriate events.	10 %
3. Collaborate/work on original research tasks with colleagues in the research team and project partners.	10 %
4. Contribute to the writing of bids for research funding.	5 %
5. Carry out administrative tasks associated with specified research funding, for example risk assessment of research activities, organisation of project meetings and documentation. Implementation of procedures required to ensure accurate and timely formal reporting and financial control.	5 %
6. Carry out occasional undergraduate and postgraduate supervision, demonstrating or lecturing duties within own area of expertise, under the direct guidance of a member of departmental academic staff.	5 %
7. Any other duties as allocated by the line manager following consultation with the post holder.	5 %

#### Internal and external relationships

Direct responsibility to the holder of research award.  
May have additional reporting and liaison responsibilities to external funding bodies or sponsors.  
May be asked to serve on a relevant School/Department committee, for example research committee.  
Collaborators/colleagues in other work areas and institutions.

#### Special Requirements

To be available to participate in fieldwork as required by the specified research project.  
To attend national and international conferences for the purpose of disseminating research results.

*Applications for Research Fellow positions will be considered from candidates who are working towards or nearing completion of a relevant PhD qualification. The title of Research Fellow will be applied upon successful completion of the PhD. Prior to the qualification being awarded the title of **Senior Research Assistant** will be given.*

## PERSON SPECIFICATION

Criteria	Essential	Desirable	How to be assessed
Qualifications, knowledge and experience	<p>PhD or equivalent professional qualifications and experience in Material science or Chemistry</p> <p>Detailed understanding and knowledge of E-textile materials (e.g. ink/paste formulation, electronic fiber/yarn), fabrication (e.g. additive manufacturing), and testing</p> <p>Expertise in one or more of the following: conductive polymers, electronic ink/paste formulation, printed electronics, biodegradable electronic materials</p>	<p>Undergraduate degree (and above) in Material Science or Chemistry</p> <p>Experience of electronic materials for wearable technologies (e.g. healthcare)</p>	CV, application, interview, references
Planning and organising	<p>Able to organise own research activities to deadline and quality standards</p> <p>Proven time management skills</p>		Application, interview, References
Problem solving and initiative	<p>Able to develop understanding of complex problems and apply in-depth knowledge to address them</p> <p>Able to develop original materials/formulations, manufacturing process, and test methods</p>		Application, interview, reference
Management and teamwork	<p>Able to support work of research student</p> <p>Work effectively in a team, understanding the strengths and weaknesses of others to help teamwork development</p>		Application, interview, references
Communicating and influencing	<p>Communicate new and complex information effectively, both verbally and in writing, engaging the interest and enthusiasm of the target audience</p> <p>Able to present research results at group meetings and conferences</p> <p>Able to write up research results for publication in leading peer-viewed journals</p>	<p>Work proactively with colleagues in other work areas/institutions, contributing specialist knowledge to achieve outcomes</p>	CV, application, interview, references
Other skills and behaviours	<p>Understanding of relevant Health &amp; Safety issues</p> <p>Positive attitude to colleagues and students</p>	<p>Experience of material/chemical risk assessment</p>	CV, application, interview
Special requirements	<p>Able to attend national and international conferences to present research results</p>		Application, interview

## JOB HAZARD ANALYSIS

### Is this an office-based post?

<input type="checkbox"/> Yes	If this post is an office-based job with routine office hazards (eg: use of VDU), no further information needs to be supplied. Do not complete the section below.
<input checked="" type="checkbox"/> No	If this post is not office-based or has some hazards other than routine office (eg: more than use of VDU) please complete the analysis below. Hiring managers are asked to complete this section as accurately as possible to ensure the safety of the post-holder.

## - HR will send a full PEHQ to all applicants for this position. Please note, if full health clearance is required for a role, this will apply to all individuals, including existing members of staff.

ENVIRONMENTAL EXPOSURES	Occasionally (<30% of time)	Frequently (30-60% of time)	Constantly (> 60% of time)
Outside work	Y		
Extremes of temperature (eg: fridge/ furnace)			
## Potential for exposure to body fluids			
## Noise (greater than 80 dba - 8 hrs twa)			
## Exposure to hazardous substances (eg: solvents, liquids, dust, fumes, biohazards). Specify below:	Y		
Frequent hand washing			
Ionising radiation			
<b>EQUIPMENT/TOOLS/MACHINES USED</b>			
## Food handling			
## Driving university vehicles(eg: car/van/LGV/PCV)			
## Use of latex gloves (prohibited unless specific clinical necessity)			
## Vibrating tools (eg: strimmers, hammer drill, lawnmowers)			
<b>PHYSICAL ABILITIES</b>			
Load manual handling			
Repetitive crouching/kneeling/stooping			
Repetitive pulling/pushing			
Repetitive lifting			
Standing for prolonged periods	Y		
Repetitive climbing (ie: steps, stools, ladders, stairs)			
Fine motor grips (eg: pipetting)			
Gross motor grips			
Repetitive reaching below shoulder height			
Repetitive reaching at shoulder height			
Repetitive reaching above shoulder height			
<b>PSYCHOSOCIAL ISSUES</b>			
Face to face contact with public	Y		
Lone working			
## Shift work/night work/on call duties			