



<b>Job title</b>	Research Associate/Fellow	<b>Job family and level</b>	Research and Teaching Level 4 (Appointment will be Level 4 Career training grade where an appointment is made before PhD has been completed)
<b>School/ Department</b>	Department of Chemical and Environmental Engineering	<b>Location</b>	Biodiscovery Institute + School of Chemistry Building

## Purpose of role

The purpose of this role will be to have specific responsibility for research, for developing research objectives and proposals for a research project in developing anti-biofilm coatings for potable water systems. The aim of this work is to help accelerate product development of anti-biofilm polymers towards commercial end goals. This will involve working in a category level 2 laboratory to investigate bacterial biofilm formation on polymer surfaces. This work will be conducted in collaboration with a UK SME and applied to potable water products to prevent infections from potable water sources. The person appointed will be expected to plan and conduct work using approaches or methodologies and techniques appropriate to the type of research and will be responsible for writing up their work for publication.

The person appointed will have the opportunity to use their initiative and creativity to identify areas for research, develop research methods and extend their research portfolio.

	<b>Main responsibilities</b> (Primary accountabilities and responsibilities expected to fulfil the role)	<b>% time per year</b>
1	To conduct a range of laboratory work including: <ul style="list-style-type: none"> <li>a) Coating of commercially relevant samples for biological testing</li> <li>b) Culturing bacterial biofilms on polymer samples in a category 2 lab facility</li> <li>c) Quantification of adhered biofilm through microscopy techniques</li> <li>d) To perform anti-biofilm bacterial assays to determine performance of polymers on newly coated components against relevant water-borne pathogens</li> </ul>	60%
2	To write up research work for publication and/or contribute to the dissemination at national/international conferences, resulting in successful research outputs.	10%
3	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%

4	Operating work with appropriate health and safety/risk assessments and considerations	10%
5	To supervise undergraduate and/or postgraduate students projects, fieldwork and placements, as appropriate. To participate in the assessment of student knowledge and co-supervise projects at Masters level.	5%
6	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
<b>Skills</b>	<ul style="list-style-type: none"> <li>Ability to analyze and illuminate data, interpret reports, evaluate and criticize texts and bring new insights.</li> <li>Experience of working with bacterial cultures in a category 2 lab facility.</li> </ul>	<ul style="list-style-type: none"> <li>Experience with imaging bacterial biofilms using confocal microscopy</li> <li>Experience in working with polymers</li> </ul>
<b>Knowledge and experience</b>	<ul style="list-style-type: none"> <li>Being able to communicate as part of a team including effective oral project updates, communicating with external stakeholders and written reports</li> <li>Training in working safely in a lab environment</li> </ul>	<ul style="list-style-type: none"> <li>Experience with writing peer review publications</li> <li>Experience of giving research talks at conferences</li> </ul>
<b>Qualifications, certification and training (relevant to role)</b>	<ul style="list-style-type: none"> <li>PhD or equivalent in microbiology research or similar area OR near to completion of a PhD</li> </ul>	
<b>Statutory, legal or special requirements</b>		



## 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



