



<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>	School of Chemistry	<b>Location</b>	University Park Campus

## Purpose of role

We are seeking to recruit a highly motivated and skilled Research Associate/Fellow to work on enzyme discovery and characterisation for polyethylene valorisation. You will join the groups of Dr Luisa Ciano, Dr Anca Pordea and Dr Samantha Bryan to express, test and characterise enzyme candidates involved in PE degradation, identified from previous studies carried out within our groups on a PE-degrading microbial strain. This is a multidisciplinary project at the interface of chemistry and biology that aims to identify and characterise novel PE-active enzymes to provide a cost-effective and sustainable process for the conversion of PE to high value products.

	<b>Main responsibilities</b> (Primary accountabilities and responsibilities expected to fulfil the role)	<b>% time per year</b>
1	To plan and conduct research using recognised approaches, methodologies and techniques within bioinformatics, enzyme production and analytical chemistry to further the aims of the research project	40%
2	To analyse and interpret data, search and evaluate literature and bring new insights to research area.	35%
3	To plan and manage own research activity and resolve problems, if required, to meet own/team research objectives and deadlines in collaboration with others.	5%
4	To produce reports and presentation for the industrial collaborator and carry out collaborative work at their site.	5%
6	To contribute to publications, presentations, scientific meetings and/or outreach to industry, scientific community and general public.	5%
7	To provide guidance as required to support staff and students, where appropriate, in own area of expertise.	5%
8	To utilise and contribute to organising and maintaining research resources and facilities, laboratories and workshops as appropriate, and to train other researchers and students in the safe use of the equipment.	4%

9	Where appropriate, to contribute to teaching, for example through laboratory demonstrations and tutorials.	1%
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## Person specification

	<b>Essential</b>	<b>Desirable</b>
<b>Skills</b>	<ul style="list-style-type: none"> <li>▪ Excellent skills in gene cloning, protein expression and purification, and in standard molecular biology techniques.</li> <li>▪ Excellent oral and written communication skills, suitable for the preparation of scientific publication and presentations to internal, national and international meetings.</li> <li>▪ Well organised and self-motivated, with effective time-management skills and the ability to manage the day-to-day running of a research project and identify research objectives.</li> <li>▪ Ability to creatively apply relevant research approaches, models, techniques and methods to the research project, while including assessment of health and safety risks.</li> <li>▪ Ability to work both independently and as an active member of a collaborative team, build relationships and collaborate with peers, senior and junior colleagues, both internally and externally.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Skills in handling and studying metalloproteins.</li> </ul>
<b>Knowledge and experience</b>	<ul style="list-style-type: none"> <li>▪ Knowledge and experience in enzyme characterisation, with knowledge of one or more of the following applied to the field: UV/vis, IR, or NMR spectroscopy, mass spectrometry, X-ray crystallography.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Experience in developing and/or interpreting activity assays, product identification, LC-MS, GC-MS, HPLC or NMR.</li> <li>▪ Experience in the (co)supervision of undergraduate and/or postgraduate research students</li> </ul>
<b>Qualifications, certification and training (relevant to role)</b>	<ul style="list-style-type: none"> <li>▪ Possess, or in the process of completing, a PhD in Biological Chemistry, Biocatalysis, Bioinorganic Chemistry or related discipline.</li> </ul>	



## 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



