



Job title	Research Associate/Fellow in Chemical / Process Engineering (Title will be 'Research Associate' where an appointment is made before PhD is completed)	Job family and level	Research and Teaching Level 4 (Appointment will be Level 4 Career Training Grade where an appointment is made before PhD has been completed)
School/ Department	Chemical and Environmental Engineering	Location	University Park Campus

Purpose of role

You will join a highly multi-disciplinary team working to develop novel microwave heating based technologies with the potential to make a difference across sectors as diverse as steelmaking, nuclear, food, catalysis and energy. Requirements of the role include the development and evaluation of novel microwave processing systems with gram to multi-tonne capacities, across potentially all of these application areas. As such, we are seeking innovative thinkers with a practical approach from a broad range of experiences and backgrounds. You should also have an enthusiasm to develop your expertise in materials processing and chemical engineering to produce high quality journal publications.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	Engineering Research <ul style="list-style-type: none"> Deliver research as part of a collaborative team and to ensure that specific research objectives are completed on the scale-up of a number of different microwave materials processing applications from laboratory to industrial scale. 	65%
2	Communication & Dissemination <ul style="list-style-type: none"> To write research papers for submission to journals and conferences and prepare progress reports on the results of research. To present the results of research at project progress meetings and at conferences. 	15%
3	Project Administration <ul style="list-style-type: none"> To assist in the co-ordination of the research and related administrative tasks, including liaising with external project collaborators 	10%
4	Teaching <ul style="list-style-type: none"> To provide assistance with supervision of doctoral students. 	5%
5	Facilities Management <ul style="list-style-type: none"> To contribute to the effective management and maintenance of laboratory equipment and facilities. 	5%

Person specification

	Essential	Desirable
Skills	<ul style="list-style-type: none"> ▪ Oral and written communication skills, including the ability to communicate with clarity on complex information. ▪ Evidence of excellent research skills ▪ Diligence, focus and a willingness to contribute to our research activities ▪ The ability to work in a team, lead both internally and externally, and interact/collaborate actively and professionally with industrial partners 	<ul style="list-style-type: none"> ▪ Skills in chemical process engineering and / or materials processing.
Knowledge and experience	<ul style="list-style-type: none"> ▪ Evidence of research publications ▪ Experience in applied research through laboratory 	<ul style="list-style-type: none"> ▪ Experience of working in an industrial research team ▪ Experience of health and safety procedures and regulations ▪ Experience in applied research through pilot plant environment and/or appropriate industrial experience ▪ Experience in the development and evaluation of new technologies
Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> • First degree in chemical, process engineering or a related discipline • Educated to PhD (or about to obtain) in Chemical/ or processing engineering or a related discipline 	



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



