



Job title	Research Assistant	Job family and level	Research and Teaching Level 4a
School/ Department	Faculty of Engineering	Location	University Park Campus

Purpose of role

As part of a highly multi-disciplinary research team, the successful candidate will contribute to the design, modelling and implementation of state-of-the-art microwave heating technologies, with the potential to access a wide range of markets across sectors as diverse as steelmaking, nuclear, food, catalysis and energy. You will be supported to work on the electromagnetic design and scale up of platform heating technologies across a range of applications including both pilot plant and industrial based work across a range of end users.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	% time per year
1	Research projects <ul style="list-style-type: none">▪ To deliver research as part of a collaborative team▪ Perform design, modelling and implementation of microwave processing systems▪ Ensure that specific research objectives are completed	70%
2	Management, coordination, and support <ul style="list-style-type: none">▪ Perform day to day management of research activities▪ Coordination between industrial and academic partners▪ Support of facilities/equipment	15%
3	Fundamental research and publications <ul style="list-style-type: none">▪ Undertake fundamental research on microwave material processing and material characterization▪ Production of reports, publications, and presentations to a high standard	15%

Person specification

	Essential	Desirable
Skills	<ul style="list-style-type: none"> Skills in electromagnetics and/or multi-physics modelling and simulation and application of tools such as COMSOL, CST, ANSYS, etc. Ability to work collaboratively with colleagues and lead when necessary Excellent oral and written communication skills, including the ability to communicate complex information with clarity Self-starting and pro-active, demonstrating an ability to work alone or in a team to meet deadlines and to prioritise tasks 	<ul style="list-style-type: none"> Drive to interact with industry and work in an interdisciplinary field to deliver commercial solutions to industry Drive to develop further skills in, and knowledge of, computational modelling Relevant IT and programming Practical skills in experimental design and delivery
Knowledge and experience	<ul style="list-style-type: none"> Development and/or evaluation of technologies Experience on following health and safety procedures and regulations 	<ul style="list-style-type: none"> Experience in the use of High-Performance Computing platforms for simulation Track record of research publications Experience in applied research in laboratory environments and/or industrial settings
Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> First Degree in Electrical Engineering or related discipline with experience of numerical simulation of electromagnetic systems 	<ul style="list-style-type: none"> PhD, EngD obtained (or near completion) electrical engineering or a related discipline



The University of Nottingham is focused on embedding equality, diversity and inclusion in all that we do. As part of this, we welcome a diverse population to join our work force and therefore encourage applicants from all communities, particularly those with protected characteristics under the Equality Act 2010.



The University is a signatory of the Declaration on Research Assessment (DORA). As such we commit to focus on the scientific content of publications (where requested or provided as part of the recruitment and selection process) as a basis for review of quality, and consideration of value and impact of research conducted, rather than any proxy measures such as Journal Impact Factor.

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

