University of Nottingham
UK | CHINA | MALAYSIA

Role profile

Job title	Research Associate / Research Fellow	Job family and level	Research and Teaching Level 4
School/ Department	School of Chemistry	Location	Jubilee Campus

Purpose of role

The successful applicant will perform research into battery components (electrolyte, additives, electrodes etc.) and how each influences performance and decomposition at next-generation battery anodes. A range of in situ characterisation methods will be applied to reveal the evolving battery chemistry and interfacial electrochemical mechanisms. With collaborators, this knowledge will be used to design new electrolytes and additives.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	**% time per year**
1	**Project management and research** ▪ Independently plan and execute a research program studying the lithium-sulfur battery and other next-generation batteries ▪ Co-ordinate with other members of the team and work collaboratively ▪ Meet agreed deadlines ▪ Keep accurate records of your research (lab books, spectra etc.) ▪ Maintain an up-to-date knowledge of the relevant literature in your field of study	80 %
2	**Administration** ▪ Manage your own administrative activities ▪ Complete administrative tasks from your line manager	5 %
3	**Supervision** ▪ Engage in the daily mentoring of graduate and project students ▪ Take responsibility for the safe running of the research laboratory.	10 %
4	**Dissemination** ▪ Disseminate and publish research findings (individually or in collaboration with colleagues) ▪ Write research papers for internationally refereed journals and present results at national and international conferences	5 %
	other ▪ You may be asked to perform other duties occasionally which are not included above, but which will be consistent with the role. For example,	

	you may be asked to contribute to the teaching of physical chemistry in the School or contribute to the preparation of proposals for research grants.	

Person specification

	Essential	Desirable
Skills	▪ Outstanding experimental and laboratory skills. ▪ Excellent written, verbal and presentation skills. ▪ Proven ability to work as part of a team.	▪ Ability to play a leading role in mentoring less-experienced researchers in a research group. ▪ Ability to generate own research ideas and lead a project.
Knowledge and experience	▪ Wide knowledge of current research and theory in your field of expertise. ▪ Expertise in one or preferably more of the following areas; electrochemistry, synthetic chemistry, battery science, spectroscopy, surface science. ▪ A publication record consistent with career stage and which demonstrates strong laboratory skills.	▪ Research experience focused on energy devices. ▪ The ability to assemble lithium-sulfur cells in a coin, Swagelok or pouch cell configuration. ▪ Have expertise in one or more of the following areas: electrochemistry, synthetic chemistry, battery science,spectroscopy,surface science ▪ Research experience focused on electrolytes and interfaces within next-generation batteries and the use of physicochemical and electrochemical characterisation methods
Qualifications, certification and training (relevant to role)	▪ Completed, or almost complete, PhD in chemistry or a related subject.	▪ Completed, or almost complete, PhD in electrochemistry or synthetic chemistry, materials science or physical organic chemistry. ▪ A track record of published research in high-quality journals.
Statutory, legal or special requirements	▪ To take reasonable care for the health and safety of yourself and of other persons who may be affected by your acts or omissions at work in accordance with the Health and Safety at Work Act 1974, EC directives and the University's Safety, Health and Environment Policies and procedures, and to cooperate with the University on any legal duties placed on it as the employer.	

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.

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