University of Nottingham
UK | CHINA | MALAYSIA

Role profile

Job title	Research Associate/Fellow in Heterogeneous phase flow photochemistry	Job family and level	Research & Teaching Level 4 (Appointment will be Level 4 Career Training Grade where an appointment is made before PhD has been completed)
School/ Department	Chemistry	Location	School of Chemistry, University Park Campus

Purpose of role

To work with Drs Anabel Lanterna and Karen Robertson within the Lubrizol-University of Nottingham-University of Warwick Prosperity Partnership focused the translation of heterogeneous photocatalysis from batch to flow technologies.

	Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)	**% time per year**
1	You will conduct high quality experimental research and provide research leadership, including expert supervision of graduate and master's students. Specifically, you will be expected carry out an innovative programme in designing of new flow reactors compatible with heterogeneous photocatalysts; developing photocatalytic processes in flow using in situ analysis for exploring reaction kinetics. You will be required to keep accurate records of your research (lab books, spectra, GC, HPLC, etc) and to provide quarterly summaries of project progress	70%
2	To prepare high quality experimental supporting information and manuscripts compatible with submission of the resulting work to high impact journals	15%
3	To liaise with industrial and academic collaborators as appropriate and identify and develop opportunities for further research and funding.	10%
4	You may be asked to perform other duties occasionally which are not included in the above but appropriate to the grade and consistent with the role	5%

Person specification

	Essential	Desirable
Skills	Excellent written, verbal and presentation skills. Excellent organisational and communication skills. An ability to identify research objectives for yourself and others. Proven ability to work flexibly both independently and as part of a team and able to manage day-to-day running of a research project. Demonstrated ability to learn new skills and instrumentation.	Skills in analytical techniques (NMR, optical spectroscopies, GPC) Skills in kinetics analysis Programming skills for remote and integrated operation of instrumentation. Demonstrated ability to develop new reactor technologies and analyses.
Knowledge and experience	▪ Demonstrated ability in at least one of the following areas: ▪ Programming skills for remote and integrated operation of instrumentation. ▪ Experience in synthetic organic chemistry. ▪ Experience in materials characterisation techniques (TEM, SEM, ICP, etc) ▪ Development of new reactor technologies and analyses. ▪ Demonstrated scientific achievements. ▪ Demonstrated experience in at least one of the following areas: ▪ integrated systems for (catalytic) reaction screening, monitoring and optimisation processes; ▪ synthetic chemistry; ▪ materials chemistry; ▪ reactor design. ▪ To take 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.	▪ Experience in synthetic organic chemistry. ▪ Experience in materials characterisation techniques (TEM, SEM, ICP, etc) ▪ Experience in the co-supervision of other research co-workers, for example PhD and Master's students ▪ Experience in photocatalysis ▪ Experience in (flow) reactor engineering Publications in international peer-reviewed journals, patents, major pieces of completed yet unpublished work, prizes awarded, previous success in gaining external funding.
Qualifications, certification and training (relevant to role)	▪ PhD (or close to completion) in chemistry or a closely related discipline (e.g. chemical engineering)	

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