



Job title	Research Associate/Fellow	Job family and level	Research and Teaching Level 4
School/ Department	School of Chemistry	Location	GSK Carbon Neutral Laboratories for Sustainable Chemistry, Jubilee Campus

Purpose of role

The purpose of this role is to conduct organic synthesis research in advanced energetic materials. Areas of focus include the development of new routes to synthesise and nitrate strained caged compounds. The project requires strong knowledge and experience of modern synthetic methodology, complex multistep synthesis, and practical synthetic organic chemistry.

	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 masters students. The project will focus on the synthesis and nitration of strained caged compounds.	60%
2	To report, in both written and oral form, to the PI, other members of the research team, and scientists from the funding body (DSTL – Defence Science and Technology Laboratory). Maintain accurate and up-to-date records (lab books, spectra etc.) to document the research project and its progress.	5%
3	To write up reports, patents, lectures, and publications in peer-reviewed journals to disseminate the results of this research.	5%
4	To coordinate and assist in related PhD and project student supervision, and/or instruction of students in the use of equipment/demonstration of techniques. To sign off lab books for group members.	10%
5	To assist in the day-to-day running of the laboratory for maximum efficiency and safety.	5%
6	To continually update knowledge and understanding in the field, and update skill base within the defined research area. Identify opportunities for adding scientific value to the research programme.	5%
7	To identify opportunities for research funding and to assist in the preparation of research proposals.	5%

8	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 chemistry teaching.	5%
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Person specification

	Essential	Desirable
Skills	<ul style="list-style-type: none"> ▪ Excellent skills in contemporary organic synthesis including: the synthesis and purification of organic compounds on mg to multi-gram scales, an ability to use air and moisture sensitive reagents and catalysts effectively, an ability to characterise and deduce the structures of complicated molecular architectures through modern spectroscopic techniques (primarily 1D and 2D NMR and mass spectrometry). Skill in bringing samples to analytical purity. ▪ Experience in the synthesis of strained, caged hydrocarbons and related compounds. ▪ Excellent written, verbal and presentation skills. 	<ul style="list-style-type: none"> ▪ Experience in modern synthetic methods such as photochemical reactions or C-H functionalisation reactions. ▪ Experience in natural product synthesis or complex multistep synthesis. ▪ Experience in co-supervision of other research co-workers
Knowledge and experience	<ul style="list-style-type: none"> ▪ A publication record in international peer-reviewed journals commensurate with stage of career. 	
Qualifications, certification and training (relevant to role)	<ul style="list-style-type: none"> ▪ An existing PhD (or close to completion) in synthetic organic chemistry. 	
Statutory, legal or special requirements	<p>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.</p>	



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

This is a Smart Art diagram. Click on the boxes to enter the role holder's job title, line manager's job title and any direct reports (if applicable). If a role does not have any direct reports, remove this box by double clicking on it and pressing Delete.

****Please remove this paragraph of instructions before submitting the role profile****



