

| Job title             | Postdoctoral Research<br>Associate/Fellow | Job family and level | Research and Teaching<br>Level 4  |
|-----------------------|---|----------------------|---|
| School/<br>Department | School of Chemistry                       | Location             | GlaxoSmithKline Carbon<br>Neutral Laboratories for<br>Sustainable Chemistry |

## Purpose of role

The purpose of this role is to develop novel methodologies in the fascinating field of organic photoredox catalysis. The new radical reactions will provide new synthetic approaches in target synthesis of active pharmaceutical ingredients and the late-stage functionalisation of complex molecules

The person appointed will be expected to plan and conduct a programme of research in this area under the direction of Dr Mattia Silvi. The person appointed will also be responsible for writing up their work for publication.

The person appointed will have the opportunity to use their initiative and creativity to identify novel areas for research, develop research methods and extend their research portfolio.

|   | Main responsibilities (Primary accountabilities and responsibilities expected to fulfil the role)   | % time<br>per<br>year |
|---|---|-----------------------|
| 1 | You will conduct high quality experimental research and provide research leadership in your project under the direction of Dr Mattia Silvi. You will provide expert supervision for other graduate and MSci students. Proficiency in carrying out organic reactions, purifying organic compounds and characterising compounds through the main analytical techniques is essential. You will perform reactions under strictly anaerobic conditions (Schlenk technique) and carry out multi-step synthesis of organic molecules. You will also perform mechanistic studies, including photophysical studies under the direction of Dr Mattia Silvi. You will carry out your research keeping accurate records of your research (lab books, spectra etc) performing data analysis etc. | 70%                   |
| 2 | You will prepare high quality experimental supporting information compatible with submission of the resulting work to high impact journals  | 10%                   |
| 3 | You will give presentations internally at group meetings and externally at national and international conferences if applicable   | 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 | 10% |
|---|---|-----|
|---|---|-----|

## Person specification

|  | Essential  | Desirable  |
|--|--|--|
| Skills   | <ul> <li>Excellent organizational, team working and oral/written communication skills, including the ability to communicate complex information with clarity</li> <li>Demonstrated ability to learn new skills and instrumentation.</li> </ul>   |  |
| Knowledge and experience   | <ul> <li>Excellent publication record in international peer-reviewed journals commensurate with stage of career.</li> <li>Be able to contribute to writing proposals to secure further funding.</li> <li>Proven experience in the development of novel organic chemical reactions.</li> <li>Proficiency in organic synthesis using air sensitive reagents, Schlenk technique. Proficiency in the use of the main analytical and purification techniques in organic chemistry.</li> </ul> | <ul> <li>Previous experience in developing novel photoredox and/or radical organic radical reactions.</li> <li>Experience in the (co)supervision of undergraduate or postgraduate student research.</li> </ul> |
| Qualifications,<br>certification and<br>training<br>(relevant to role) | PhD in synthetic organic chemistry<br>OR near to completion of a PhD.  |  |
| Statutory, legal<br>or special<br>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.

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 always equitable and fair and works with integrity. Proactively looks for

ways to develop the team and is comfortable providing clarity by

explaining the rationale behind decisions.

**Taking ownership** Is highly self-aware, looking for ways to improve, both taking on board

and offering constructive feedback. Inspires others to take accountability

for their own areas.

Forward thinking Driven to question the status quo and explore new ideas, supporting the

team to "lead the way" in terms of know-how and learning.

**Professional pride**Sets the bar high with quality systems and control measures in place.

Demands high standards of others identifying and addressing any gaps

to enhance the overall performance.

Always inclusive Ensures accessibility to the wider community, actively encouraging

inclusion and seeking to involve others. Ensures others always consider the wider context when sharing information making full use of networks

and connections.

## Key relationships with others

