Research Fellow in Synthetic Chemistry
Faculty of Mathematics and Physical Sciences

Salary: University Grade 6 (£26,052 - £31,076 p.a.)
Reference: MAPCH1057

Fixed term for 24 months
Research Fellow in Synthetic Chemistry
School of Chemistry

Are you looking to apply your skills in synthetic chemistry to the development of new approaches for fragment-based drug discovery?

As Research Fellow in Synthetic Chemistry you will join a major 3-year EPSRC-funded programme (awarded to Professors Steve Marsden and Adam Nelson) focused on developing new catalytic tools for the direct elaboration of 3D fragment ‘hits’ into lead compounds. You will assist the Investigators in delivering a general toolkit of methods for the direct functionalization of sp\(^3\) C-H bonds with medicinally-relevant functionality and applying this to the regio- and stereoselective elaboration of 3D fragments, exemplified in the context of fragments binding to disease-relevant proteins.

What does the role entail?

As Research Fellow your main duties will include:

- Contributing to the development of the project, as directed by Professors Marsden and Nelson, by assisting with the design and development of novel methods for the functionalization of sp\(^3\) C-H bonds within novel, highly 3D fragments;
- Generating and prioritising original ideas, in collaboration with Professors Marsden and Nelson, internal and external partners (Astex, Diamond Light Source, CoEBio3 at the University of Manchester);
- Contributing to the dissemination of research results in leading peer-reviewed journals and through presentation at meetings and conferences, with guidance as necessary;
- Supporting the activities of the research group to ensure a successful programme of investigation, including participation at group meetings and seminars;
- Providing support and advice to other members of the group, and assisting in the supervision of students;
- Working both independently and as part of a larger team of researchers and stakeholders, including undertaking research secondments at other research organisations as required by the project;
These duties provide a framework for the role and should not be regarded as a definitive list. Other reasonable duties may be required consistent with the grade of the post.

**What will you bring to the role?**

As a Research Fellow you will have:

- A PhD in synthetic chemical methodology and/or catalysis development or have submitted a thesis prior to taking up appointment;
- The ability to develop and optimise novel (catalytic) reactions
- Experience in the use of modern spectroscopic methods (e.g. two-dimensional NMR, IR, mass spectrometry) to characterise synthetic intermediates;
- A good background knowledge of contemporary research in Synthetic Chemistry and Catalysis, and an interest in C-H activation chemistry and/or fragment-based discovery methods;
- Experience in Synthetic Chemistry in its broadest sense;
- Evidence of contributing to papers in internationally recognised, peer-reviewed journals or evidence of publishable research in progress;
- Good interpersonal and communication skills, both written and verbal and the ability to communicate effectively with a wide range of stakeholders;
- Good time management and planning skills, with the ability to meet tight deadlines;
- A proven ability to work well both independently and as part of a team;
- The ability to work accurately and carefully;
- A strong commitment to your own continuous professional development.

You may also have:

- Accepted publications in internationally recognised, peer-reviewed journals;
- Expertise in C-H activation chemistry;
- The ability to use modern chromatographic, spectroscopic and parallel-synthesis techniques to rapidly optimize new (catalytic) chemical transformations;
- Practical experience in the following: (i) catalytic C-H activation chemistry; (ii) experience in the synthesis and elaboration of 3D fragments or scaffolds for drug discovery;
- Experience of public communication and engagement.

How to apply

You can apply for this role online; more guidance can be found on our How to Apply information. Applications should be submitted by 23.59 (UK time) on the role's closing date.

Contact information

To explore the post further or for any queries you may have, please contact:

**Steve Marsden, Professor of Organic Chemistry**
Tel: +44 (0)113 343 6425
Email: s.p.marsden@leeds.ac.uk

Additional information

Find out more about the research of the Marsden and Nelson Groups.

For further information about the project, the School of Chemistry and the Astbury Centre for Structural Molecular Biology please see the supplementary information document.

Working at Leeds

You can find out more about our generous benefits package and more about what it is like to work at the University and live in the Leeds area in our Working at Leeds information.

Candidates with disabilities

Information for candidates with disabilities, impairments or health conditions, including requesting alternative formats, can be found in our Accessibility information or by getting in touch with us at disclosure@leeds.ac.uk.
Criminal record information

A criminal record check is not required for this position, however, all applicants will be required to declare if they have any ‘unspent’ criminal offences, including those pending.

Any offer of appointment will be in accordance with our Criminal Records policy. You can find out more about required checks and declarations in our Criminal Records information.