

Project Title

Synthesis of Shielded Molecular Radicals for Quantum Information Technologies

A PhD studentship is available in the group of Dr Iain Wright, University of Edinburgh; School of Chemistry, <u>Dr Iain A. Wright</u>.

This project will be conducted in collaboration with Dr Bela Bode, University of St Andrews; School of Chemistry, Dr Bela Bode - School of Chemistry.

Project Summary

Qubits are the quantum information equivalent of the classical "on/off" bits used in traditional computer. They operate through manipulation of the spin states of electrons, typically employing light and/or applied magnetic fields.

This project will focus on the synthesis of new molecules bearing multiple stable radical sites, held in well-defined 3D configurations. These new molecules will be synthesised at Edinburgh followed by detailed continuous wave and pulse EPR spectroscopy at St Andrews. Detailed photophysical, electrochemical and computational analysis of all new compounds will also be completed.

Enthusiasm for target-driven, multi-step synthetic organic chemistry will be necessary for this project.

How to apply

In the first instance, the initial application of cover letter and CV should be directed to:

Dr Iain A. Wright, School of Chemistry, University of Edinburgh, David Brewster Road, Edinburgh EH9 3FJ, UK. Email: iain.wright@ed.ac.uk

The position will remain open until filled. A closing date may be added at a later date.

Funding Notes

The studentship is fully funded for 42 months by the University of Edinburgh and covers tuition fees and an annual stipend at the UKRI rate, for 2024-25 this is £19,237 per annum, for a candidate satisfying EPSRC residency criteria, see:

https://www.ukri.org/wp-content/uploads/2024/04/UKRI-020424-TrainingGrantTermsConditionsApril2024.pdf

IMPORTANT

Before Submitting your cover letter and CV, please complete the online <u>School of Chemistry</u> <u>Equality</u>, <u>Diversity and Inclusion Form</u>, <u>entry 2025-26</u>.

The form will automatically generate a unique 'Response ID number' that you <u>must</u> include in your cover letter.

Equality and Diversity

The School of Chemistry holds a Silver Athena SWAN award in recognition of our commitment to advance gender equality in higher education. The University is a member of the Race Equality Charter and is a Stonewall Scotland Diversity Champion, actively promoting LGBT equality.

The University has a range of initiatives to support a family friendly working environment. For further information, please see our University Initiatives website: https://equality-diversity.ed.ac.uk/inclusion/family-and-carer