

PhD Studentship in the Department of Chemistry:

A theoretical underpinning of chiral selectivity on magnetic surfaces

Applications are invited for a 3.5-year PhD studentship to work with Dr Alex Thom, investigating, through computer modelling, the interactions of chiral molecules with magnetic surfaces which lead to spontaneous chiral selectivity.

The project, funded by the Leverhulme Centre for Life in the Universe is in collaboration with Prof. Dimitar Sasselov, Director of Harvard University's Origins of Life initiatives, and whose group will perform experiments in tandem with the computer simulations.

The project will involve calculation of the interactions of chiral molecules and surfaces using Density Functional Theory and *ab initio* wavefunction-based methods. A background in electronic structure theory is essential, and experience of running quantum chemical calculations and of programming is highly desirable.

The studentship will commence in October 2024 and provides a maintenance grant at the UKRI national rate, and tuition fees at the UK/home rate. Non-UK applicants will be considered if they are able to fund the overseas fees differential, or if they are awarded a suitable scholarship. Full details of the University's entrance requirements and scholarships are specified on the following link: <https://www.postgraduate.study.cam.ac.uk/>

To apply, please submit an application through the University Applicant Portal: <https://www.postgraduate.study.cam.ac.uk/courses/directory/pcchdpch> for the course "PhD in Chemistry", naming Dr Alex Thom as potential supervisor, and also email an additional cover letter and CV to Dr Thom's PA at theory-sec@ch.cam.ac.uk. The deadline for applications is Monday 8th January 2024, and interviews will be 10th-12th January 2024.

For any queries about this studentship, please contact Dr Thom by email at ajwt3@cam.ac.uk.

Please quote reference <INSERT HERE> on your application and in any correspondence about this vacancy.

The University actively supports equality, diversity and inclusion and encourages applications from all sections of society.