



Applications are invited for a PhD studentship for the following project:

Synthesis and catalysis of two-dimensional nanomaterials beyond graphene

The position will be based in the McDonald group (Bioinspired Inorganic Chemistry group, <http://chemistry.tcd.ie/staff/people/mcdonald>) at the School of Chemistry, Trinity College Dublin, the University of Dublin, and be part of the Engineered Functional Materials platform within the Advanced Materials and Bioengineering Research Centre (AMBER) centre.

The candidate student will develop novel routes towards 2D nanomaterials, using small molecule initiators and conditions that will yield pristine 2D nanomaterials in high yields. The student will develop methods for the preparation of exfoliated nanomaterials *in situ*, without the need for further liquid or chemical exfoliation methods. This project will provide quick and efficient routes towards well-established 2D nanomaterials, while potentially opening the door to novel nanomaterials, as yet inaccessible to the community. With these new methods for nanomaterial preparation, the student will explore the linkage of 2D nanomaterials and the applications of such nanomaterials in industrially relevant catalysis.

The ideal applicant will have a 1st Class Honours Bachelor's or Master's degree in Chemistry.

The researcher will work closely with other members of a multidisciplinary project team. Excellent written and oral communication skills are essential.

Positions will remain open until filled but preferred start date is September 2 2019.

Applications from female candidates and those from under-represented backgrounds are strongly encouraged. Trinity College Dublin is an equal opportunities employer and is committed to the continued development of employment policies, procedures and practices which do not discriminate on grounds such as gender, civil status, family status, ethnicity, age, disability, sexual orientation, religion or membership of the Travelling community.

How to apply:

For further information or to apply please email a PDF copy of a *brief* cover letter and CV, including names and contact details for 3 referees, to aidan.mcdonald@tcd.ie.

This position is funded by the SFI-research centre AMBER.