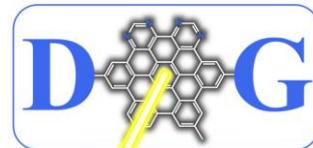


Applications are invited for the following a PhD studentship for the following project:

Stepping into the Light: the design, synthesis and application of organic photosensitisers.



The position will be based within the synthetic research team of Professor Sylvia Draper within the Advanced Materials and Bioengineering Research Centre (AMBER) centre.

Summary of project

Building on a body of work within the host team, this project aims to develop next generation triplet photosensitisers with a view to demonstrating their applications in both a biological and industrial context. The group is actively developing novel and optimal materials (e.g. NIR absorption/emission) in (i) photodynamic therapy and (ii) two-photon absorption and photopolymerisation processes for advanced manufacturing.

Recent group successes include include the delivery and evaluation of molecular upconversion materials that exhibit the highest recorded singlet oxygen and upconversion quantum yields (using low density power sources). These have resulted a number of Draper-led and highlighted publications which you can access through our website <https://chemistry.tcd.ie/staff/academic/smdraper>.

Both supervisor and research team work together to provide a supportive and innovative environment and to promote and foster the development new ideas. They have been singled-out to receive a number of awards (2017 Royal Irish Academy Young Irish Chemist's Award 2018 (Junsi Wang for the best Chemistry Ph.D. thesis), Graduate Teaching award 2018 (Robert Conway-Kenny) and the David Brown Award for Inorganic Chemistry 2018 (Sylvia Draper for her contribution to Inorganic research)).

For more information please contact Sylvia Draper via email (smdraper@tcd.ie or deanems@tcd.ie)

The ideal applicants will have a 1st or 2:1 Class Honours Bachelor's degree in *Chemistry*. Previous experience in synthetic organic and coordination chemistry and an interest in molecular photophysics would be advantageous but not essential.

How to apply: CVs with the names and addresses of three referees should be submitted to *Sylvia Draper at* deanems@tcd.ie

Positions will remain opened until filled but preferred start date is September 2 2020. Only short-listed applications will be acknowledged.

This position is funded by AMBER, SFI Research Centre for Advanced Materials and BioEngineering Research & CRANN Institute. The AMBER research centre, as a community of researchers, welcomes its responsibility to provide equal opportunities for all. We are actively seeking diversity in our research teams and particularly encourage applications from underrepresented groups.