

PhD OPPORTUNITY – Joint project TCD-NUIG

Applications are invited from suitably qualified candidates for a PhD studentship with the School of Chemistry at Trinity College Dublin (ccem-group.com) and the National University of Ireland Galway (www.nuigalway.ie/chemlight). We are looking for a highly motivated student who wishes to expand their knowledge in theoretical and experimental chemistry to deliver new materials for the highly demanding and complex light-driven nitrogen reduction reaction. The project will be based on a computer-led design of semiconductor materials and hybrid molecule/semiconductor systems, and subsequent preparation, characterisation and catalytic activity studies using state-of-the-art facilities. We are looking for a potential candidate with a 1st class BSc degree in Chemistry, currently studying an MSc in Chemistry, and willing to start the PhD by October 2019.

The Computational Catalysis and Energy Materials Group (TCD) conducts state-of-the-art computational research in Electrocatalysts for Sustainable Energy, 2D-Materials for Catalysis, Metal Oxides Catalysis and Homogeneous Catalysis. Most of this research is carried out in close collaboration with leading experimental groups in the field and from worldwide academic institutions. Whenever possible, we try to guide the design of novel catalysts with an enhanced performance and ask our experimental collaborators to synthesize and test them to support our theoretical predictions.

The ChemLight group (NUI Galway) works on the use of visible-light to drive chemical reactions and to image molecules and materials in biological systems. The group focuses on the preparation and study of organometallic complexes, materials and hybrid systems and their application in three main areas: Energy, Health and Life. The research is a combination of synthesis (organic and inorganic), spectroscopy, electrochemistry and catalysis.

Interested candidates are asked to submit a full application containing a cover letter, a CV and two letters of recommendation to pau.farras@nuigalway.ie or GARCIAMM@tcd.ie. **The deadline for submission is Friday 5th October.**