Department of Chemistry

Fully Funded PhD Studentships
Profs Mike Ward and Matthew I. Gibson

**PhD project:** Glycosylated coordination complexes for luminescent imaging of lectins

**Supervisors:** Prof. Mike Ward and Prof Matthew I. Gibson

**Deadline:** Until Filled (to Start October 2019 or as close as possible)

**Project description:**
Two x 3.5 year PhD studentships are available on a Leverhulme Trust funded grant entitled ‘Glycosylated coordination complexes for luminescent imaging of lectins’ with Prof Mike Ward and Prof Matt Gibson of the Department of Chemistry, University of Warwick. The project will involve the synthesis and characterisation of metal complex assemblies bearing unique combinations of glycans (sugars) attached to them. This ambitious project will seek to apply these new materials as analytical tools to probe pathogens such as bacteria or viruses. As such the project will involve a combination of synthetic organic and inorganic chemistry, structural characterisation and analysis, alongside a range of spectroscopic assays to evaluate interaction of the labelled complexes with proteins and bacteria.

Both PhD studentships will work across the whole project, but one will focus more on the synthesis and coordination chemistry (with Prof Ward) and the other will focus more on the analytical and biological aspects of the assays (with Prof Gibson). A good honours degree (2:1 or better in Chemistry or a closely-related relevant discipline) is required with experience of synthetic chemistry and/or analytical chemistry.

**Requirements:**
Good degree (2.i or 1st class) in chemistry, materials science or related subjects. Must be willing to engage in interdisciplinary research as part of a diverse team of chemists and biologists. Funding only available for UK/EU students.

**How to apply:**
In the first instance please contact Prof Gibson and/or Prof Ward by email at m.i.gibson@warwick.ac.uk or M.D.Ward@warwick.ac.uk. Please include in your email a 2 page MAX CV and your current/predicted grades.

Research group information is available here [https://warwick.ac.uk/fac/sci/chemistry/research/ward](https://warwick.ac.uk/fac/sci/chemistry/research/ward)

[http://www.warwick.ac.uk/go/gibsongroup/](http://www.warwick.ac.uk/go/gibsongroup/)

Details on how to apply formally can be found at [http://www.go.warwick.ac.uk/pgapply](http://www.go.warwick.ac.uk/pgapply)