PhD Studentship (1+3 Integrated MSc and PhD)
Dr Matthew I. Gibson and Dr G-L. Davies

PhD project:  Responsive Nanoparticle Platforms for Enrichment of Therapeutically Relevant Proteins.

Supervisors:  Dr M. Gibson, Dr G-L. Davies and Dr D. Mitchel (Med School)
Deadline:  31st January – MUST contact Supervisors in advance

Project description:
This project will focus on using multifunctional nanoparticles to aid in the purification of proteins. Protein drugs (e.g. insulin) are becoming increasingly important in the pharmaceutical industry, and are typically produced by recombinant (genetic) methods in microorganisms. However, an outstanding challenge remains the purification of these proteins from the complex biological milieu. This project will use advanced polymer-coated nanoparticles to facilitate the extraction and purification of proteins and the demonstration of the biological activity. The project will combine the fields of controlled polymerization, nanoscience, protein science with analytical science.

Requirements:
Students should have, or be expected to achieve, a 2:1 or 1st Class degree. Backgrounds in Chemistry or Biochemistry are welcome.

How to apply:
To apply please contact the academics in the first instance and then via the MIBTP webpage
http://www2.warwick.ac.uk/fac/cross_fac/mibtp/

Research group information is available on our webpages http://www.warwick.ac.uk/go/gibsongroup and http://warwick.ac.uk/daviesgroup. The project will be mostly based in the Chemistry Department, but with the chance to work in the Medical School also. We have brand new facilities (in the Materials and Analytical Sciences building) for synthetic, analytical and biological work. Please contact m.i.gibson@warwick.ac.uk and/or g-l.davies@warwick.ac.uk for more details.