



PhD Studentship Available

Molecular Recognition in Robust Imprinted Polymers and Biomimetic Metal Nanoparticles

Molecular recognition is a vital process in all natural biological systems. The goal of this project is to build artificial recognition sites into synthetic polymers and metal nanoparticles. Our aim is to generate artificial materials which can recognise biological molecules with a high degree of specificity. The project will be **interdisciplinary**, combining aspects of polymer chemistry, nanoscale science, biochemistry, and analytical chemistry. This is an exciting area of research which could have a strong impact in the growing area of **biotechnology**.



Schematic of Generalised Imprinting Procedure



Transmission Electron Micrograph of Gold Nanoparticles

The project will be funded by a **BBSRC Committee Studentship** (stipend = **£8000 p/a**) which also includes an allocation for conference attendance.

Please contact **Dr Andrew Cooper** (aicooper@liv.ac.uk) or **Dr Mathias Brust** (m.brust@liv.ac.uk) for further details General information can be found on our web sites:

http://www.liv.ac.uk/Chemistry/Staff/coopera.html http://www.liv.ac.uk/Chemistry/Staff/brust.html