

**EPSRC EngD Studentship
Polymers and Biomaterials
School of Pharmacy and Pharmaceutical Sciences**

Soft nano-materials for release applications: polymeric vesicles

Professor Nicola Tirelli

The School of Pharmacy and Pharmaceutical Sciences is inviting applications for a distinguished four-year Engineering Doctorate (EngD) studentship within the frame of Manufacture: Process and Product Engineering. This EPSRC/Unilever studentship is restricted to UK/EU nationals due to the nature of the funding and will attract an annual stipend of £13,500 and full tuition fees. The study is due to commence in September 2007.

The target of this research is the development of technologically advanced materials that can find application in home and personal care markets. The aim is to develop nano-aggregates for the (bio) targeted and responsive release of active ingredients. The study is therefore expected to have a direct impact from both the academic investigation perspective and in the broader commercial context.

The successful applicant will be working in chemical synthesis, physico-chemical characterisation, formulation and release studies, and scale-up on one side, market and competitive analysis on the other (with continuous involvement in professional development activities).

The project will span two internationally recognised research centres, the Laboratory of Polymers and Biomaterials at the University of Manchester and the Unilever Physical Science Group in Port Sunlight.

The Manchester Polymers and Biomaterials group has an interdisciplinary composition (chemists, chemical and materials engineers, pharmacists and biologists) and international position in the field of polymeric biomaterials. The Laboratory, recently relocated in refurbished facilities, provides an ideal environment for polymer synthesis, physico-chemical characterisation and biomaterial assessment.

Unilever Port Sunlight is the key research site for home and personal care products including laundry products, shampoos, deodorants and toothpastes. The Physical Science Group has built long-term expertise in colloid science, organic/polymer synthesis, molecular and materials modelling and measurement science. It has a growing interest in site-specific delivery of active ingredients from aqueous surfactant solutions. In addition the Group has strong links with the Process Science Group on site.

The successful applicant will hold a background as a chemical engineer, materials scientist or chemist, who can span through the project, from the more synthesis-related aspects, through processing to market analysis. Candidates are expected to be of the highest calibre and hold excellent references.

Although the EngD studentship is open to both UK and EU nationals, the full studentship value is only available to UK permanent residents. Therefore, non UK applicants from within the EU are welcome to apply if they either have permanent UK residency or have been permanently based within the UK for the last three years. Applications from non-EU candidates will unfortunately not be considered.

The EngD provides a unique opportunity to combine pioneering academic research with industrial experience and successful completion will open the door to numerous product engineering career opportunities in either sector.

Applications should be submitted in the form of a CV and detailed covering letter outlining your suitability for the EngD study to Professor Nicola Tirelli:

nicola.tirelli@manchester.ac.uk

Contact details for at least two academic referees should also be provided.

Further information on the EngD degree and project is available by contacting Professor Tirelli at the address provided.

Applications are welcomed up to and including Friday 15th June 2007.

<http://biomat.pharmacy.man.ac.uk/>