PhD Studentship
Professor Sébastien Perrier

PhD project: Living Radical Polymerization
Supervisors: Professor Sébastien Perrier
Deadline: 30th January 2015

This scholarship is fully funded (fees and stipend included), partially supported by industry, and is open to UK or EU nationals only. Duration is for 3 years starting as soon as possible.

Project description:
A PhD Studentship is available, cosponsored by an industrial partner, to join the group of Professor Sébastien Perrier at the University of Warwick (UK).

Our research focuses on the synthesis of macromolecules with highly controlled and pre-determinable structures using modern polymer and organic synthetic methods. We exploit supramolecular interactions to organise these molecules into nanostructured materials, for applications in nanomedicine (e.g. drug delivery, vaccines, antimicrobial materials), nanotechnology (e.g. components for optoelectronic applications), material science (e.g. rheology modifiers) or chemistry (polymerization catalysts, processes, etc.).

A project in collaboration with an industrial partner has arisen from our recent work on the design of complex polymer architectures,\textsuperscript{1,2} and will explore the use of advanced polymerization techniques, in particular RAFT polymerization, to design new functional macromolecules. The project will investigate the synthesis, characterization and applications of these materials in an industrial context.

This opportunity will enable the successful candidate to work on fundamental polymer chemistry (based at Warwick) as well as being exposed to an industrial environment, by having the option to spend time in the facilities of our industrial partner.

References:
Requirements:
Applicants should have (or be about to receive) at least a Honours degree (at least upper second-class or equivalent) in Chemistry or Materials Sciences.

How to apply:
Enquiries and informal applications should include a CV and be made as soon as possible to Sébastien Perrier at s.perrier@warwick.ac.uk.
Details of the research group can be found here: http://www2.warwick.ac.uk/fac/sci/chemistry/research/perrier/
Details on how to apply formally can be found at http://www.go.warwick.ac.uk/pgapply