EPSRC supported EngD Project Optimal Design of Sustainable Capsules for Targeted Delivery of Active.

Chemical Engineering (Univ of Birmingham)
P&G (Brussels)

Tax free bursary of £18,000 and fees paid

Tailoring the structural properties of sustainable capsules containing active materials is of critical importance to maximize stability and performance in consumer product formulations. To ensure optimal capsule design, we desire:

(i) The ability to *modify* the surface properties of capsules with different coating materials to boost the performance of the encapsulated active, maximizing targeted delivery.

(ii) The ability to *tailor* the structure of the capsules to improve stability of the encapsulated material in the finished product throughout storage, supply chain, etc.

(iv) The ability to *identify* and *reapply* new methods to optimize wall surface and composition enhancing capsule stability and performance in 'real world' consumer applications.

(iii) The ability to *predict* and *measure* the 'trigger properties' when changing capsule surface structure and properties as well as wall thickness, capsule size, etc.

The initial focus will be to tailor the structure and surface of sustainable capsules to archive superior stability and performance in consumer product formulations used in laundry machine washing processes.

To be eligible for EPSRC funding candidates must have at least a 2(1) in Chemical Engineering or a related Scientific discipline or a 2(2) plus M.Sc. Please email your c.v. to r.w.greenwood@bham.ac.uk. For more details on the Engineering Doctorate scheme please visit http://www.birmingham.ac.uk/schools/chemical-engineering/postgraduate/eng-d/index.aspx