**EPSRC supported EngD. Process Measurement and Control for Formulation**

**Johnson Matthey ( Billingham )**

**Prof M. Simmons ( Chem Eng, University of Birmingham )**

**Tax free bursary of £ 19,900 p.a. plus fees paid**

Johnson Matthey [JM] makes a large number of formulated products. These are heavily characterised and tested during product development and manufacturing. During manufacture, many of these products pass through structured liquid and soft solid phases, the morphology and chemical nature of which are known to be critical to final product form and performance. The move towards better process efficiency, product control and increasing digitisation of manufacturing plant leads inexorably to a need for improved on-line measurement, including structural aspects of soft solids and structured liquids that cannot currently be measured in real time in a manufacturing plant.

This project will specifically address some of the measurement and process control development needs of JM. The EngD student will work as an integral part of a new process measurement and control group. JM is building an enhanced capability in this area, enabling the digitisation drive. The EngD researcher will play a key role within this team; developing bespoke measurement methods for given formulations and products. The focus of the EngD will be the fundamental R&D needs of that group, but also being involved in trials and implementation of novel process measurement and control methods on manufacturing plants.

To be eligible for EPSRC funding candidates must have at least a 2(1) in an Engineering or Scientific discipline or a 2(2) plus MSc. 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>