

## RSC/ERDF Lecture Tuesday, 9<sup>th</sup> October 2012

### “The use of continuous hydrothermal synthesis to produce formulated nanomaterials”

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Continuous hydrothermal synthesis is a promising technique for the manufacture of nanomaterials in dispersion. An aqueous metal salt is flowed into a superheated (or supercritical) water flow to produce dispersed nanoparticles through hydrolysis and dehydration reactions. The talk will focus on the development of a new reactor from bench scale and beyond. The process is now being scaled to 100tn/annum plant at a chemical site in the North West of England.

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