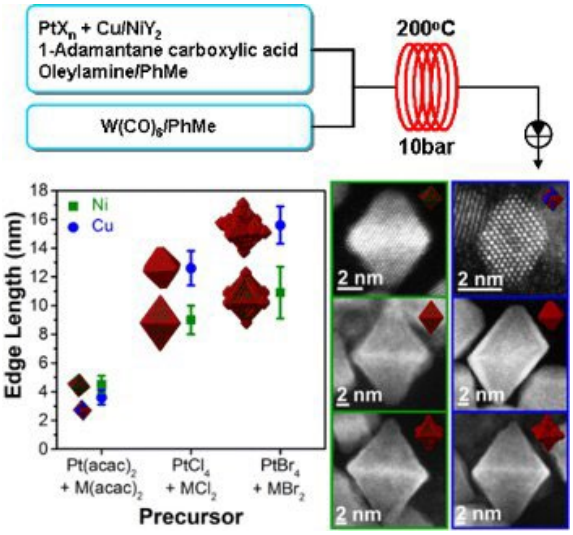
Publication 44: Synthesis of Bimetallic Nano-Alloys under Continuous Flow Conditions



A flow-through strategy for the synthesis of bimetallic nano-alloys under pressurised superheated conditions using a Uniqsis Multi-X flow chemistry system which permits substantial control of key physical properties of the particles is presented.

In particular, it was found that particles could be produced with a tuneable size distribution and shape.

Moreover, ligand dependent control of surface morphology and the distribution of the metals throughout the particles was also possible.In addition, the present strategy was found to be scalable and therefore potentially suitable for the industrial production of well-defined nano-alloys.

A. P. LaGrow, K. R. Knudsen, N. M. AlYami, D. H. Anjum, O. M. Bakr, Chem. Mater., 2015, ASAP, DOI: 10.1021