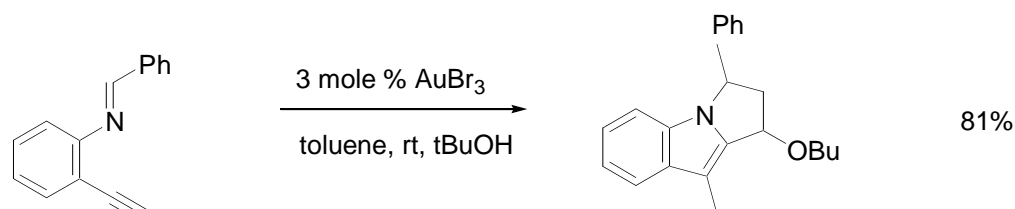
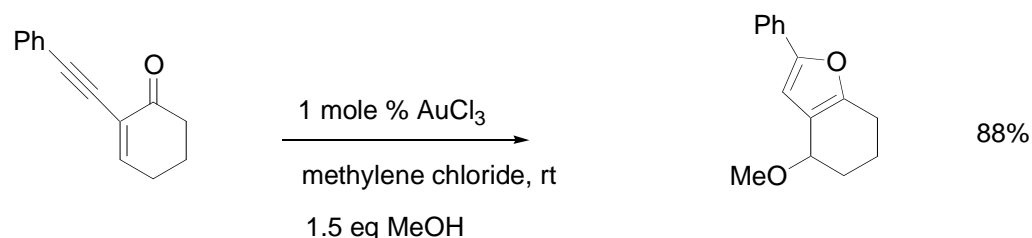


## There's Gold in Them There Reactions

Care I (TL) was always taught that gold was an unreactive metal and not much use in catalytic reactions. But that was in the sixties. In 1973 Bond (not James! nor anything to do with Goldfinger) reported that a supported gold catalyst could be used in the hydrogenation of olefins and more than 10 years later the groups of Haruta and, independently, Hutchings showed that gold catalysts could be used in the low temperature oxidation of CO and in the hydrochlorination of acetylene to vinyl chloride. For the first time, these studies showed that gold was the preferred catalyst for these reactions and destroyed the myth of the poor activity of gold. This area has become a dynamic hot spot in catalysis research and has resulted in the European Union Research Training Network AURICAT.

A recent review describes exactly how useful gold catalysts can be. The review, written by two of the most active researchers in the field, Prof Hashmi from University of Stuttgart and Prof Hutchins at the University of Cardiff, covers both heterogeneous and homogeneous catalysis. (A S K Hashmi and G J Hutchins, *Angew Chem Int Ed*, 2006, 45, 7896-7936).

Some interesting transformations are shown in the scheme below.



We've Got Chemistry

Highlights from Literature Published 19/2/07