Hydrogenation of Nitroarenes Using a Carbon Nanotube–Ruthenium Nanohybrid

**Significance:** Carbon nanotube supported ruthenium nanoparticles (RuNPs/CNT) were prepared and applied to the hydrogenation of nitroarenes with hydrazine monohydrate. The reduction of the nitro group proceeded to give the corresponding anilines (in water, 95–99% yield, eq.1) or N-aryl hydroxylamines (in THF, 95–99% yield, eq. 2).

**Comment:** The average diameter of the RuNPs was found to be 2 nm. RuNPs/CNT were recovered by centrifugation and reused four times without significant loss of catalytic activity both in water and THF. ICP-MS analysis of the reaction mixture showed no leaching of ruthenium during the reaction.