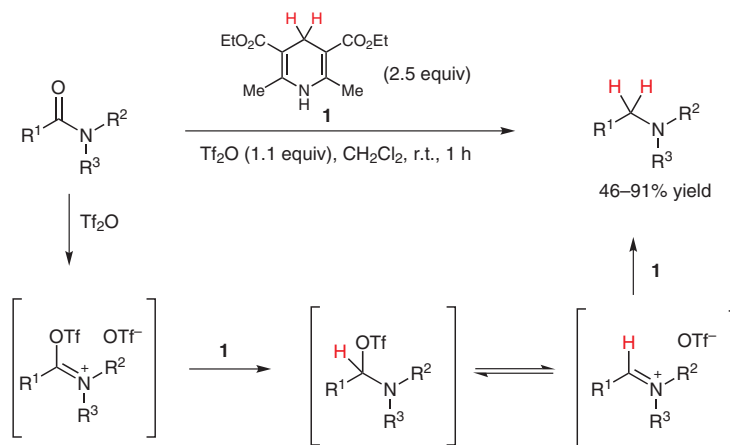


G. BARBE, A. B. CHARETTE* (UNIVERSITÉ DE MONTRÉAL, CANADA)

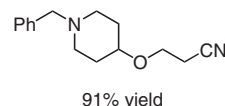
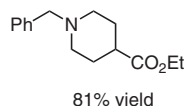
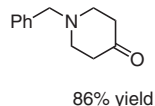
Highly Chemoselective Metal-Free Reduction of Tertiary Amides

J. Am. Chem. Soc. **2008**, *130*, 18-19.

Metal-Free Reduction of Tertiary Amides



Selected examples:



Significance: The authors report a chemoselective metal-free reduction of tertiary amides using Hantzsch ester **1** as the hydride source. Triflic anhydride was used as stoichiometric activating agent for this reaction. The authors have identified that functionalities such as esters, ketones, and epoxides are tolerated in their reaction and good to high yields (46–91%) are obtained for different tertiary amides.

Comment: Hantzsch esters have recently been used for different organocatalytic reductions (see reviews below). Here the authors have found that reduction of amides, which is typically a metal-mediated process, can be conducted in a metal-free fashion using Hantzsch esters. The high chemoselectivity of this process is quite attractive. A catalytic version would constitute a major advancement.

Reviews: S. J. Connon *Org. Biomol. Chem.* **2007**, *5*, 3407; S. L. You *Chem. Asian J.* **2007**, *2*, 820.

SYNFACTS Contributors: Benjamin List, Subhas Chandra Pan
Synfacts 2008, 3, 0314-0314 Published online: 21.02.2008
DOI: 10.1055/s-2008-1042719; Reg-No.: B00208SF

2008 © THIEME STUTTGART • NEW YORK