Category

Metal-Mediated Synthesis

Key words

amination
silyl ketene acetals
α-amino esters
copper

T. MIURA, M. MORIMOTO, M. MURAKAMI* (KYOTO UNIVERSITY, JAPAN) Copper-Catalyzed Amination of Silyl Ketene Acetals with *N*-Chloroamines *Org. Lett.* **2012**, *14*, 5214–5217.

Copper-Catalyzed Amination of Silyl Ketene Acetals with *N*-Chloroamines

Significance: A copper-catalyzed amination reaction of silyl ketene acetals with N-chloroamines under mild reaction conditions has been developed. The formation of the corresponding α -amino esters is catalyzed by a copper(I)–2,2'-bipyridyl complex which furnishes them in high yield.

Comment: According to the authors, the bulky silyl group disfavors the formation of unwanted byproducts and improves the yield of the desired α -amino ester. Furthermore, the facile availability of N-chloroamines from secondary amines with NCS permits a one-pot, two-step synthesis, especially if the N-chloroamine is too unstable for isolation.

SYNFACTS Contributors: Paul Knochel, Christoph Sämann Synfacts 2013, 9(1), 0092 Published online: 17.12.2012

DOI: 10.1055/s-0032-1317736; Reg-No.: P15812SF