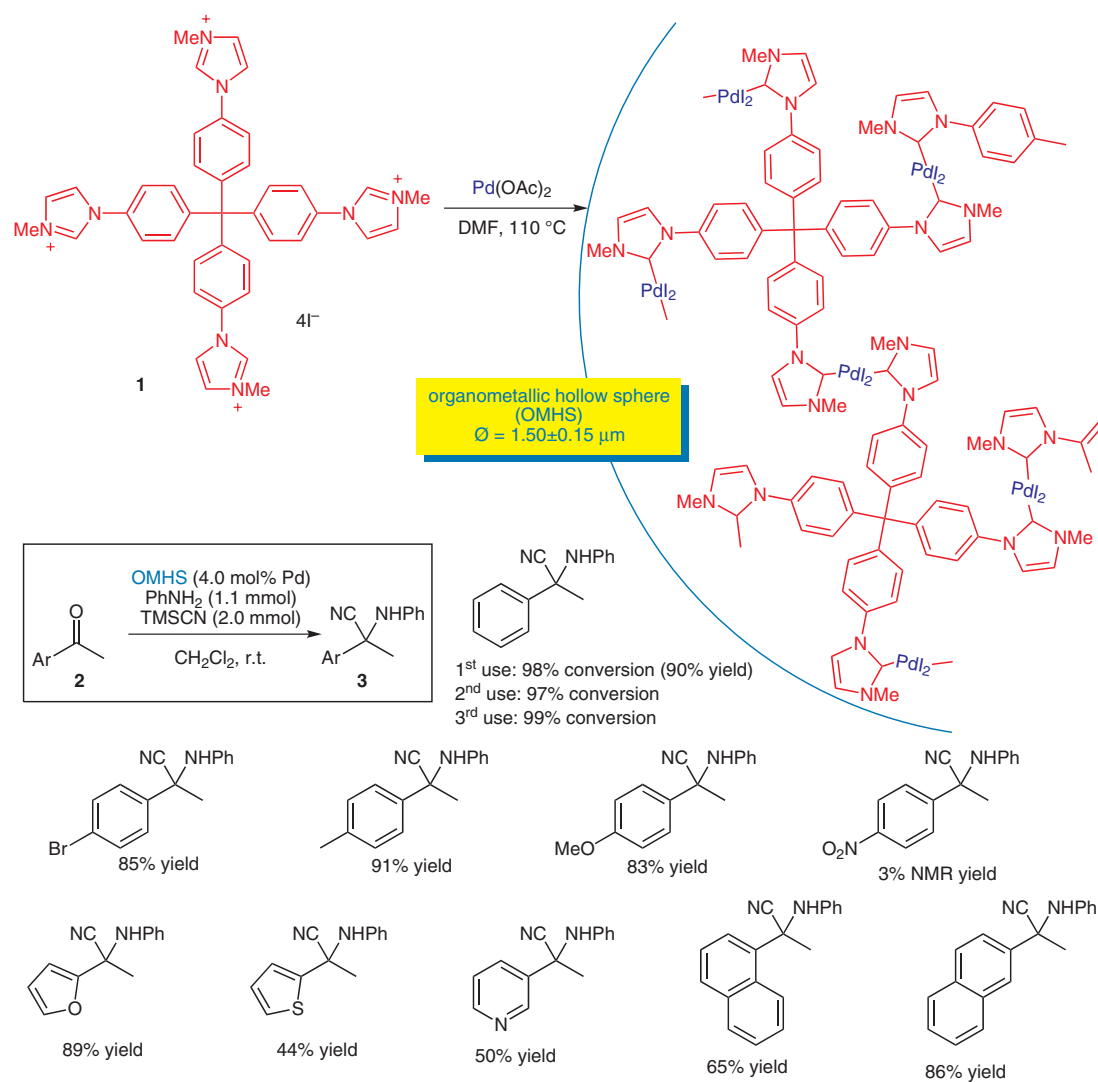


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Organometallic Hollow Spheres Bearing Bis(N-Heterocyclic Carbene)–Palladium Species: Catalytic Application in Three-Component Strecker Reactions

*Angew. Chem. Int. Ed.* **2010**, *49*, 7718–7722.

# Self-Supported NHC–Palladium Catalyst for the Strecker Synthesis



**Significance:** The organometallic hollow sphere (OMHS) catalyst was prepared by self-supporting of  $\text{Pd}(\text{OAc})_2$  and tetrahedral **1** having four imidazolium salts. The Strecker reaction of aryl methyl ketones **2** with OMHS gave the corresponding  $\alpha$ -aminonitriles **3** in 3–91% yield.

**Comment:** The average diameter of OMHS was  $1.50 \pm 0.15 \mu\text{m}$ . OMHS was reused twice without loss of catalytic activity. The catalyst was characterized with SEM, TEM, EDS, TGA, elementary analysis, and solid-phase  $^{13}\text{C}$  NMR spectroscopy.

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Synfacts 2011, 3, 0337-0337 Published online: 16.02.2011

DOI: 10.1055/s-0030-1259462; Reg-No.: Y00711SF