C. K. HAZRA, Q. DHERBASSY, J. WENCEL-DELORD,* F. COLOBERT* (UNIVERSITÉ DE STRASBOURG, FRANCE)

Synthesis of Axially Chiral Biaryls through Sulfoxide-Directed Asymmetric Mild C-H Activation and Dynamic Kinetic Resolution

Angew. Chem. Int. Ed. 2014, 53, 13871-13875.

Axially Chiral Biaryl Compounds via Dynamic Kinetic Resolution

Significance: Axially chiral biaryl motifs are privileged structures as ligands for transition-metal catalysis. The authors present a dynamic kinetic resolution of racemic biaryls with a palladium catalyst using point chirality of a sulfoxide directing group.

Comment: Although some substrates were slow to react (up to 7 days), good yields and stereoselectivities were observed. Treatment of the products with *t*-BuLi at –90 °C led to an axially stable aryllithium species, which was trapped with CO₂.

 SYNFACTS Contributors: Mark Lautens, Zafar Qureshi

 Synfacts 2015, 11(1), 0065
 Published online: 15.12.2014

 DOI: 10.1055/s-0034-1379689; Reg-No.: L15514SF

Metal-Catalyzed Asymmetric Synthesis and Stereoselective Reactions

Key words

palladium chiral sulfoxides atropisomers