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2个手性咪唑配体的合成

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Synthesis of two chiral imidazolylidene ligands

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摘要 以(+)-胡薄荷酮和*R*-联萘酚为原料,分别经手性胺和手性卤代烃中间体,合成了2个手性咪唑及其鎓盐,在碱性条件下这种盐可转化为咪唑卡宾配体.为其他手性咪唑配体的合成提供了可借鉴的方法.

关键词: 胡薄荷酮 *R*-联萘酚 手性咪唑配体 有机合成

Abstract: Taking chiral amine and halide as key intermediates, two chiral imidazoles and their salts were prepared from pulegone and *R*-binaphol, these salts can be transformed to N-Heterocyclic Carbene (NHC) ligands when treated with base.

Key words: pulegone *R*-binaphol chiral imidazolylidene ligand organic synthesis

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- [1] WANZLICK H W, SCHÖNHERR H J. Direkt-synthese eines Quecksilbersalz-carben-komplexes[J]. Angew Chem, 1968, 80(4): 154-155.
- [2] FELE K. 1,3-dimethyl-4-imidazolyliden-(2)-pentacarbonylchrom ein neuer Übergangsmetall-carben-komplex[J]. J Organomet Chem, 1968, 12(3): 42-43.
- [3] HUANG J, NOLAN S P. Efficient cross-coupling of aryl chlorides with aryl Grignard reagents (Kumada Reaction) mediated by a palladium/imidazolium chloride system[J]. J Am Chem Soc, 1999, 121(42): 9889-9890.
- [4] WESKAMP T, BÖHM V P W, HERRMANN W A. N-Heterocyclic carbenes: state of the art in transition-metal-complex synthesis[J]. Organomet Chem, 2000, 600(1/2): 12-22.
- [5] HERRMANN W A, ELISON M E, FISHER J F, et al. Metal complexes of N-heterocyclic carbenes: a new structural principle for catalysts in homogeneous catalysis[J]. Angew Chem Int Ed Engl, 1995, 34(21): 2371-2374.

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- [6] HERRMANN W A, REISINGER C P, SPIEGLER M. Chelating N-heterocyclic carbene ligands in palladium-catalyzed heck-type reactions[J]. *J Organomet Chem*, 1998, 557(1): 93-96. 
- [7] TRNKA T M, GRUBBS R H. The Development of L_2X_2Ru CHR Olefin metathesis catalysts: an organometallic success story[J]. *Acc Chem Res*, 2001, 34(4): 18-29. 
- [8] WESKAMP T, KOHL F J, HIERINGER W, et al. Highly active ruthenium catalysts for olefin metathesis: the synergy of N-heterocyclic carbenes and coordinatively labile ligands[J]. *Angew Chem Int Ed*, 1999, 38(16): 2 416-2 419.
- [9] COLEMAN A W, HITCHCOCK P B, LAPPERT M F, et al. Routes to optically active electron-rich olefins (L^*2 and some derived carbenemetal complexes)[J]. *J Organomet Chem*, 1983, 250(1): 9-14. 
- [10] GARDINER M G, HERRMANN W A, REISINGER C P, et al. Dicationic chelating N-heterocyclic carbene complexes of palladium: new catalysts for the copolymerisation of C_2H_4 and CO[J]. *J Organomet Chem*, 1999, 572(2): 239-247. 
- [11] HUANG J, SCHANZ H J, STEVENS E D, et al. Stereoelectronic effects characterizing nucleophilic carbene ligands bound to the $C_p^*RuCl(C_p^* = \eta^5-C_5Me_5)$ Moiety: a structural and thermochemical investigation[J]. *Organometallics*, 1999, 18(12): 2 370-2 375.

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