

stereochemistry (general, optical resolution)

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Steric versus Electronic Effects of the Ligand in the Enantioselective Palladium-Catalyzed Allylic Alkylation with Chiral Oxazolinylpyridines.

Three cyano(oxazolinyl)pyridines (Ia)–(Ic) and bis(oxazolinyl)pyridines [cf. (Ie)] are prepared and studied as ligands in the palladium-catalyzed asymmetric allylic alkylation of diphenylpropenyl acetate (II) with dimethyl malonate (III). The cyano-containing ligands (Ia)–(Ic) show a somewhat decreased reaction rate as compared to the corresponding methyl analogues [cf. (Id)], which is possibly due to decrease of the nucleophilic ability of palladium in the presence of the cyano group. In contrast, the stereoselectivity is enhanced for cyano derivatives compared to methyl analogues. Bis(oxazolinyl)pyridines [cf. (Ie)] are less effective ligands for asymmetric allylic alkylation reaction. — (CHELUCCI, GIORGIO; DERIU, SEBASTIANO; PINNA, GERARD A.; SABA, ANTONIO; VALENTI, RAFFAELA; *Tetrahedron: Asymmetry* 10 (1999) 19, 3803-3809; Dip. Chim., Univ. Sassari, I-07100 Sassari, Italy; EN)

