organo-platinum compounds

S 8300 52 - 278 Convenient Synthesis of α -Chiral Platinum Alkyls. — The dihalo-Pt(II) complexes (I) and (IV) react with ethyl diazoacetate (II) to give the racemic monoalkyl complexes (III) and (V) in high yields. The cyclooctadiene complex (IIIb) is a convenient starting material for the synthesis of other species of this type by cyclooctadiene substitution with e.g. (VI) giving (Va), (-)-diop or (+) -chiraphos. Addition of the diazoacetate (II) to the (-)-diop complex (VII) results in formation of the diastereomers (VIII) and (IX). The major isomer (VIII) is readily separated. The X-ray structure analysis of (VIII) reveals the R configuration at the α -C atom. This diastereoselective insertion reaction is a simple, general, and efficient method for the synthesis of chiral Pt alkyls. — (BERGAMINI, P.; COSTA, E.; SOSTERO, S.; ORPEN, A. G.; PRINGLE, P. G.; Organometallics 10 (1991) 9, 2989-2990; Dip. Chim., Univ. Ferrara, 44100 Ferrara, Italy; EN)

1