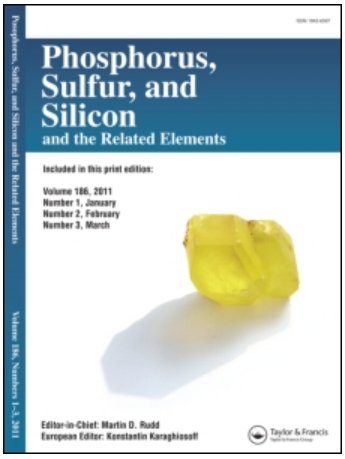

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Bis(O-Carboxyphenylaminomethyl)Phenylphosphine - A Novel Hybride Ligand in Coordination Chemistry of Transition Metals

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BIS(O-CARBOXYPHENYLAMINOMETHYL)PHENYLPHOSPHINE - A NOVEL HYBRIDE LIGAND IN COORDINATION CHEMISTRY OF TRANSITION METALS.

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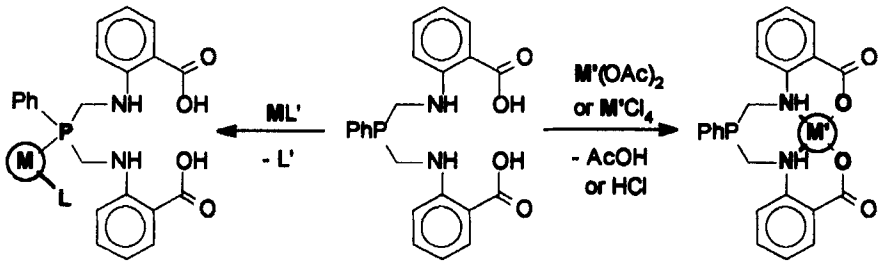
Functional hybride phosphines with hard (O, N) and soft (P) donor sites are a base for synthesis of heterobinuclear complexes, in particular of early-late d-block elements, which are perspective high effective and selective homogenous catalysts.

At has been shown that bis(o-carboxyphenylaminomethyl)phenylphosphine in the course of complex formation gave two types of compounds: P-complexes with polydentate ligand (A) and O,N-chelate metalocyclic phosphines (B).



(A) L = $PhP(CH_2NHC_6H_4COOH\text{-}o)_2$ (B)

(M) = $PtCl_2$, $PdCl_2$, CuCl, CuJ(Py), $Ni(CO)_2$

(M') = Ni^{2+}, Co^{2+}, Zn^{2+}, Cu^{2+}, Mn^{2+}, $TiCl_2^{2+}$, $ZrCl_2^{2+}$

The chlorides and carbonyls of the late d-block transition metals gave complexes of the type (A), but the acetates of late and chlorides of early d-block transition metals formed the metalcontaining phosphines of the type (B). The obtained mononuclear complexes are the suitable synthons for heterobinuclear compounds.