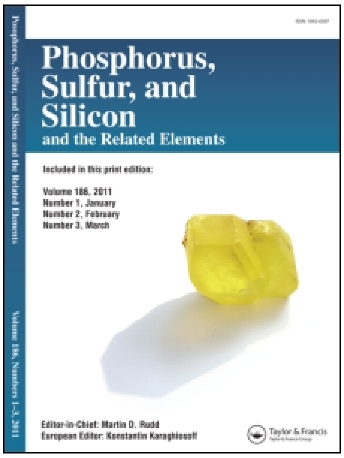

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A Novel Type of Water-Soluble Chiral Phosphines Synthesis of Individual RR-and SS-Enantioisomers of Dipotassium 1,3-Di{Phenyl(Carboxylato)Methyl}-5-Phenyl-1,3,5-Diazaphosphorinane

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A Novel Type of Water-Soluble Chiral Phosphines Synthesis of Individual RR-and SS-Enantioisomers of Dipotassium 1,3-Di{Phenyl(Carboxylato)Methyl}-5-Phenyl-1,3,5-Diazaphosphorinane

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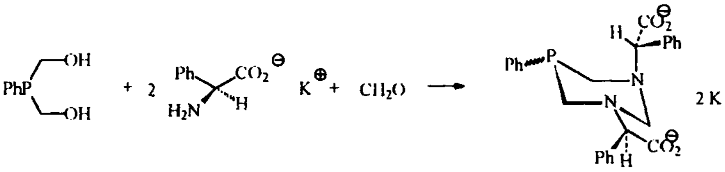
The last decade rapid development of catalytic reactions in organic solvent - water bifase systems, especially enantioselective processes, focused the attention of chemists on the synthetic roads to the chiral water-soluble phosphine ligands. The reaction of bis(oxymethyl)phenyl-phosphine, paraform and (R)- or (S)-α-aminoacides open a road to a numerous chiral heterocyclic phosphines and their transition metal complexes with high water solubility.



Two individual optical (RR)- and (SS)-isomers of dikalium 1,3-di{phenyl(carboxylato)methyl}-5-phenyl-1,3,5-diazaphosphorinane have been synthesized from (R)- and (S)-α-phenyl-glicine [1]. Structure of the chiral water-soluble compounds have been established on the base of NMR ^{1}H, ^{13}C, ^{31}P and IR spectroscopy.

References

[1] A.A. Karasik, I.O. Georgiev, R.I. Vasiliev, O.G. Sinyashin, Mendeleev Commun. 1998 in press.