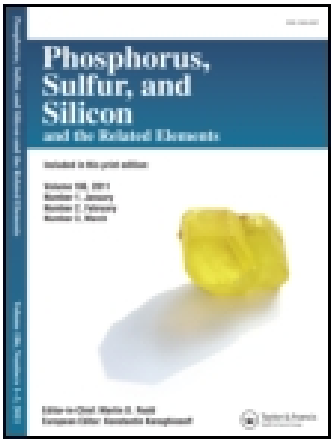

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Bisdithiophosphonic Acids In Metal Complex Formation Reactions

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Bisdithiophosphonic Acids In Metal Complex Formation Reactions

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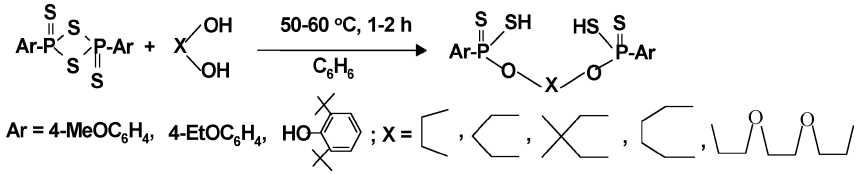
The methods of synthesizing bisaryldithiophosphonic acids and their metal complexes were developed.

Keywords bisaryldithiophosphonic acids; bisammonium salts, metal complexes

There is a considerable interest in metal derivatives of phosphorus thioacids due to their use in metal complex catalysis. We have involved in the reactions of formation of bisaryldithiophosphonic acids 2,4-diaryl-1,3,2,4-dithiadiphosphetane-2,4-disulfides with such diols as 1,3-propanediol, 1,4-butandiol, neopentyl glycol, bis(2-hydroxyethyl)sulfide and tri(ethylene glycol).



SCHEME 1

Refluxing of mixture of bisaryldithiophosphonic acids with metal oxides or subsitution reactions of bisammonium salts of these thioacids

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lead to metal complex formation involving cobalt, copper, nickel and zinc.

REFERENCE

[1] G. A. Kutyrev, O. S. Korolev, R. A. Cherkasov, A. N. Pudovik, N. R. Safiullina, E. G. Yarkova, O. Ye. Lebedeva, *Zh. Obsch. Khim. (Russ.)*, **56,** 1227 (1986).