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C- and N-Substituted Phosphorus(III) Derivatives of Azomethines

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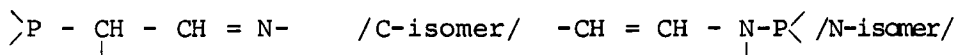
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C- AND N-SUBSTITUTED PHOSPHORUS (III) DERIVATIVES OF AZOMETHINES

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The reactions of halogenides of P(III) acids with lithium derivatives of azomethines depending on the substituents at the phosphorus atom, the structure of azomethines and conditions of the reaction were studied. A method for synthesizing the C- and N-phosphorus(III) substituted azomethines was proposed:



The reaction of halogenophosphites and PCl_3 with azomethines in the presence of organic bases leads to the formation of N- phosphorus(III)-substituted azomethines and 1,3,5-diazaphospholanes. The rearrangement of N-phosphorus(III)-substituted azomethines, containing alkyl substituents at the phosphorus atom, into isomeric α -C-phosphorus(III)-substituted azomethines was observed for the first time. The prototropic equilibrium of azomethine and enamine (E and Z) forms of α -C-phosphorus(III)-substituted azomethines was studied. C,N-dielement-substituted azomethines were synthesized by the reaction of lithium with halogenides of P(III) acid and the elements of the fourth group.