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## Phosphorus, Sulfur, and Silicon and the Related Elements

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### Functionalization of Cyclic Derivatives of Two-Coordinated Phosphorus

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## FUNCTIONALIZATION OF CYCLIC DERIVATIVES OF TWO-COORDINATED PHOSPHORUS

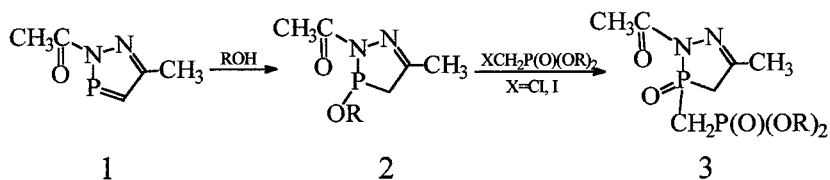
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The phosphorus containing heterocycles are of interest as bioactive substances with the various properties. We have studied of the interaction of the cyclic derivatives of the two-coordinated phosphorus, containing P=C bond—2H-1,2,3-diazaphospholes—with hydrogen thio- and dithiophosphates, dialkylphosphone sulfenylchlorides, and silyldithiophosphates.

It is found, that the direction and the pathway of the processes of the P- and C-functionalization of diazaphospholes depend on the nature of the element at the thiolic sulfur atom of the phosphates (RO)<sub>2</sub>P(X)SR (X=O, S; R=H, Cl, SiMe<sub>3</sub>).

The interaction of the 3-ethoxy-1,2,3-diazaphospholene **2** with  $\alpha$ -halogen-methylenephosphonate proceeds with the formation of the new P-substituted 3-oxa-1,2,3-diazaphospholenes **3** according to the Arbuzov reaction scheme.



SCHEME 1

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