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Synthesis of New Functionalized Organophosphorus Acids and their Derivatives

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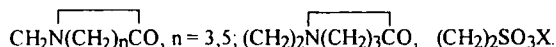
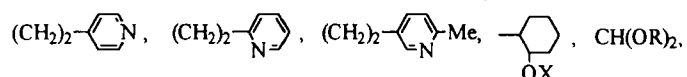
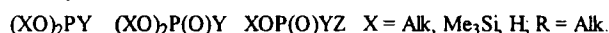
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Synthesis of New Functionalized Organophosphorus Acids and their Derivatives

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Functionalized organophosphorus acids and their derivatives are of great interest as chelating ligands, bioactive substances with various properties and the key compounds for the synthesis of phosphorus containing peptides. We have developed the convenient methods of the synthesis of new functionalized organophosphorus acids and their derivatives using a series of PH-acids and their esters with highly reactive fragments PH and POSi as well as phosphorus containing amines with fragments PCHNH and PCHNSi. These organophosphorus synthons react smoothly with α -heterosubstituted derivatives of various amines and amides, functionalized alkenes and their oxides, as well as with acyl and sulfonyl chlorides giving the perspective compounds with high yields. New available types of new functionalized organophosphorus acids and their derivatives are presented below.



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