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Phosphorus, Sulfur, and Silicon and the Related Elements

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713618290>

Effective Methods of Preparation of Some Classes of Phosphororganic Compounds

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To cite this Article Khachatryan, R. H. , Sayadian, S. V. , Hovsepian, S. A. , Grigorian, N. Yu. and Injikian, M. H.(1990) 'Effective Methods of Preparation of Some Classes of Phosphororganic Compounds', *Phosphorus, Sulfur, and Silicon and the Related Elements*, 51: 1, 260

To link to this Article: DOI: 10.1080/10426509008040794

URL: <http://dx.doi.org/10.1080/10426509008040794>

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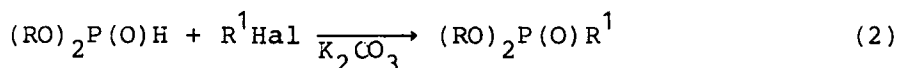
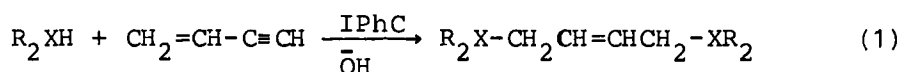
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EFFECTIVE METHODS OF PREPARATION OF SOME CLASSES OF PHOSPHORORGANIC COMPOUNDS

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The convenient methods of preparation of secondary and tertiary phosphines, phosphinoxides and phosphonates on the basis of corresponding P-H acids and alkyl-, allyl-, allenyl-, ethynylarylhalides, 1,3-diens, acetylenic and vinyl-acetylenic hydrocarbons as alkylating agents have been elaborated. The reactions were proceeded in organic solvents in the presence of potassium carbonate under the conditions of interphase catalysis in liquid-liquid, liquid-solid systems, as well as in superbasic medium (schemes 1, 2)



Double reactivity of dialkylphosphites under the conditions of interphase catalysis, unusual interaction of P-H acids with chloro-1,3-diens, including anomal nucleophilic substitution of chlorine at sp^2 hybridized carbon atom, insertion of oxygen into P-C bond during the reaction of secondary phosphinoxides with propargylic- and vinylpropargylic halides in the presence of potassium carbonate in inert gas flow (3) were studied.

