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

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### Reactions of P(III)-Halides with Calix[4]Resorcinarenes

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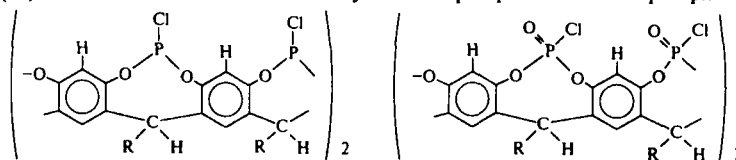
## Reactions of P(III)-Halides with Calix[4]Resorcinarenes

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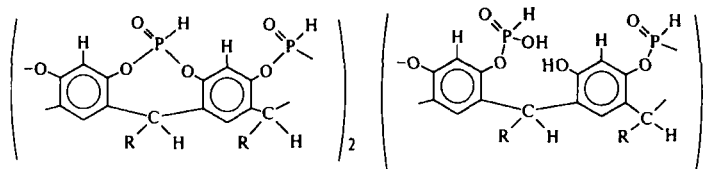
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Reactions of calix[4]resorcinarenes, bearing aliphatic radicals of different length, with  
 P(III)-halides results in the formation of cyclic chlorophosphites and chlorophosphates.



It was found, that in accordance with experimental conditions reactions of calixarenes  
 and alkyldichlorophosphites proceed with the formation of cyclic P(IV)-cavitands or  
 linear hydrophosphoryl cavitands. Reactions of cyclic P(III)-chlorides based on the  
 calix[4]resorcinarenes matrix with different protonodonor reagents and their silylated  
 derivatives were investigated. Various preparative methods of synthesizing new cyclic  
 and linear hydrophosphoric compounds based on the calix[4]resorcinaren matrix have  
 been elaborated.



Reactions of synthesized hydrophosphoric acids with carbonyl compounds,  
 imines and diimines were investigated. Methods of synthesizing new P-containing  
 cavitands with functional groups have been developed.