

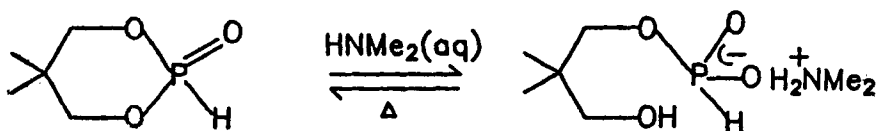
Rings and cages containing phosphorus, arsenic and antimony—New chemistry

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In our studies on the chemistry of phosphorus, arsenic and antimony wherein these elements form part of a ring or a cage, several novel structural and reactivity patterns have emerged among which the following aspects are discussed.

(i) Novel reversible cyclization of the type

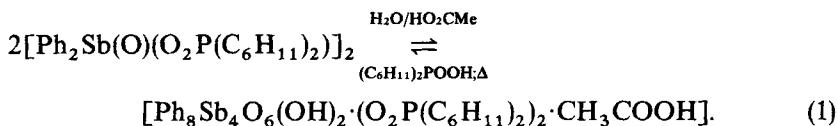


(ii) “Hydrolysis” (in the absence of KF) and “no hydrolysis” (in the presence of KF) of cyclic phosphites.

(iii) Phosphate-base complexes of the type $[(\text{OCH}_2\text{CMe}_2\text{CH}_2\text{O})\text{P}(\text{O})\text{-N-C}_5\text{H}_4 = \overset{+}{\text{N}}\text{Me}_2][\text{Cl}]^-$.

(iv) Structural characterization of unique hexacoordinated As(V) and P(V) compounds as exemplified by $(\text{OCH}_2\text{CMe}_2\text{CH}_2\text{O})_2\text{As}(\text{OC}_9\text{H}_6\text{N})$ and $(\text{NC}_9\text{H}_6\text{O})\text{P}(2,2'\text{-OC}_6\text{H}_4\text{-C}_6\text{H}_4\text{O})_2$.

(v) New antimony cages and their interconversion,



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