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### Synthesis and Properties of Some New 1,3,2-Oxazaphospholane Derivatives

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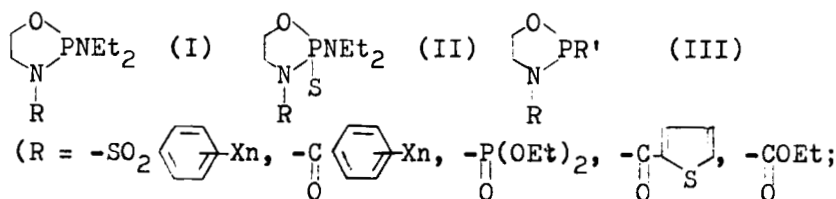
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# Synthesis and Properties of Some New 1,3,2-Oxazaphospholane Derivatives

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A series of new 1,3,2-oxazaphospholane derivatives(I) have been synthesized by the reaction of  $P(NEt_2)_3$  with  $RNHCH_2CH_2OH$  at  $80^\circ C$ . When they were refluxed with sulfur in benzene, compounds II were obtained conveniently.



X = alkyl, alkoxy, halogen; n = 1-2; R' = aryloxy, amino)

I were easily oxidized in air. The  $-NEt_2$  group of I was substituted with phenols and amines giving the corresponding derivatives(III). With high stability II(R =  $-SO_2$    $-X_n$ ) were not decomposed until  $224^\circ C$  by thermo-gravimetric analysis. They were hydrolyzed with 0.01N NaOH in the aqueous solution of acetone with the cleavage of P-O bond but with the 0.01N HCl in the same solvent there was no cleavage of P-N bond. It seems that TBP intermediates might not be predominant in the process of acidic hydrolysis.

All of these compounds have been confirmed by elemental analysis, IR,  $^1H$ NMR and MS.