

A NEW METHOD FOR THE SYNTHESIS OF OLEFINS VIA β -HYDROXYALKYL PHENYL SULFIDES

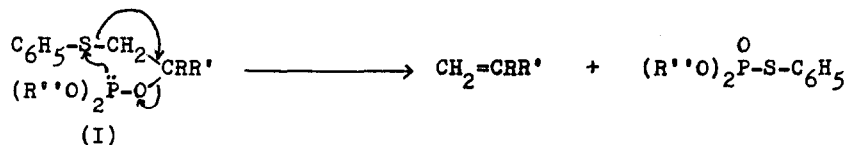
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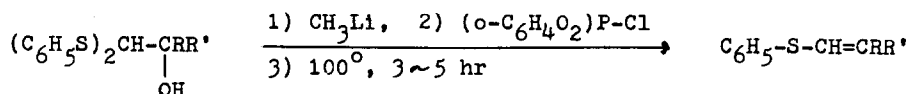
Organo-sulfur groups such as sulfide or sulfoxide are well known to activate the neighbouring methyl or methylene group for metallation and the compound containing them has been frequently used in the synthetic organic reactions.¹ However, a large problem how to remove such groups after an appropriate coupling reaction with an electrophile has not been dissolved completely yet.²

In the previous paper, we reported the reaction for removal of methylsulfinyl group from β -hydroxyalkyl methyl sulfoxide to convert it into the corresponding olefin by way of the trivalent phosphorus compound.³ The purpose of our present study was to extend this type of the reaction to removal of phenylmercapto group, which would convert β -hydroxyalkyl phenyl sulfide into the corresponding olefin by way of intramolecular nucleophilic attack of trivalent phosphorus to sulfur atom, followed by elimination of phenylthiol ester of phosphoric ester as shown in the following equation. Verification of this hypothesis has



been obtained as follows.

and the corresponding phenyl vinyl sulfide was obtained in good yield by the similar procedure as shown in the following equation.



Further studies on this type of the reaction are presently being done.

R=R' = C ₆ H ₅	83%
R = C ₆ H ₅ , R' = CH ₃	90%
R, R' = -(CH ₂) ₅ -	68%
R = n-C ₅ H ₁₁ , R' = H	79%

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