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

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### ADDITION OF SULPHENYL CHLORIDES TO ACETYLENES. STRUCTURE OF THE INTERMEDIATE

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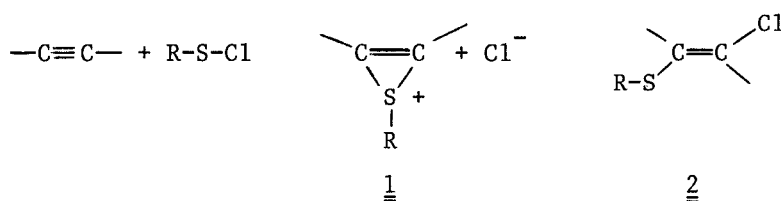
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ADDITION OF SULPHENYL CHLORIDES TO ACETYLENES.  
STRUCTURE OF THE INTERMEDIATE.

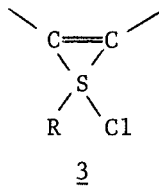
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Sulphenyl chlorides react in sulphur dioxide with acetylenes to give thiirenium chlorides 1 which lead to the final adducts 2.



Thiirenium ions have been detected in this solvent at low temperature and in some cases their hexachloroantimonate or tetrafluoroborate salts isolated. Evidence for the intervention of a different intermediate, probably the sulphurane 3, in reactions carried out in different, less polar solvents will be discussed.



The effect of the solvent on the orientation of the addition of sulphenyl chlorides to asymmetric acetylenes will be also briefly reexamined.