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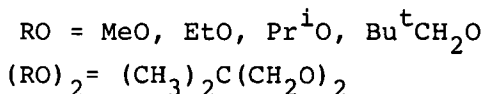
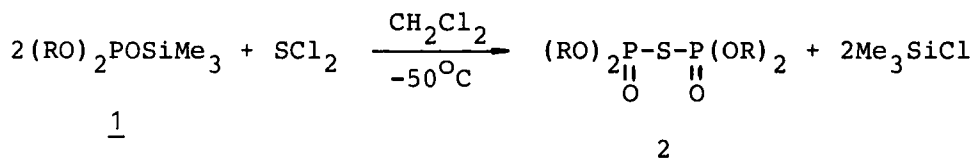
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THE SIMPLE SYNTHESIS OF TETRA-ALKYL SYM-MONOTHIOPYROPHOSPHATES

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This poster is a part of our continuing interest in the
 synthesis and properties of phosphorus acid anhydride ana-
 logs, particularly those containing sulfur bridge between
 two phosphorus atoms (1). Recently we have found that sul-
 fur dichloride reacts with dialkyl trimethylsilyl phos-
 phites 1 to form the tetra-alkyl sym-monothiopyrophos-
 phates 2 in high yield.



Under the reaction conditions no isomerisation of 2 into
 its asymmetric isomer (RO)₂P(S)-O-P(O)(OR)₂ is observed.
 The reaction proceeds most probably through the formation
 of dialkoxy oxophosphoranesulphenyl chloride (RO)₂P(O)SCl.
 Application of this reaction in nucleotide chemistry will
 be also mentioned.

(1) A. Skowrońska, R. Dembiński, R. Kamiński, J. Michalski,
 J. Chem. Soc., Perkin Trans. I, 1988, 2197.