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Phosphorus, Sulfur, and Silicon and the Related Elements

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713618290>

THE SULFUR FUNCTIONALIZATION OF ACTIVE METHYLENE COMPOUNDS

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To cite this Article Senning, Alexander(1979) 'THE SULFUR FUNCTIONALIZATION OF ACTIVE METHYLENE COMPOUNDS', *Phosphorus, Sulfur, and Silicon and the Related Elements*, 6: 1, 275

To link to this Article: DOI: 10.1080/03086647908080411

URL: <http://dx.doi.org/10.1080/03086647908080411>

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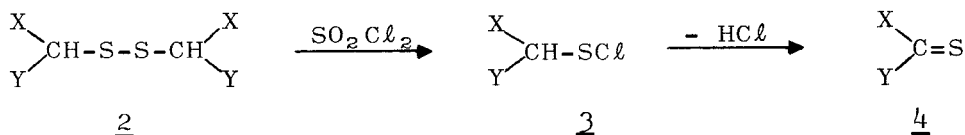
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Thiolsulfonates 1 are reagents which can sulfonylate simple aliphatic ketones and other active methylene compounds under remarkably mild conditions. The reported synthesis of 1¹ has been improved considerably.



The disulfides 2 derived from active methylene compounds can be cleaved with SO_2Cl_2 (or Cl_2) to yield sulfenyl chlorides 3 which may react further to the corresponding thiocarbonyl compounds 4 which, in turn, are subject to a variety of addition and/or fragmentation reactions.



Typical end products accessible via these routes are thioamides, α -chlorosulfenamides, and 1,3-oxathioles.²

¹ N.H.NILSSON, C.JACOBSEN, and A.SENNING, Chem.Comm., 1970, 658.

²A. SENNING, Bull. Soc. Chim. Belges 86 (1977) 675.