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# Phosphorus, Sulfur, and Silicon and the Related Elements

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## A NEW SYNTHESIS OF $\beta$ -FURYL THIOETHERS

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### A NEW SYNTHESIS OF \$-FURYL THIOETHERS

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An efficient route to  $\beta$ -furyl thioethers  $\underline{2}$  and  $\underline{3}$  was developed by reaction of oxalyldiacetophenone  $\underline{1}$  with methylmercaptan in presence of ZnCl<sub>2</sub>:

Structures of products  $\underline{2}$  and  $\underline{3}$  were consistent with spectral data, and on desulphurization with Raney nickel they gave the same 2-phenyl-5-( $\beta$ -phenylethyl)-furan ( $\underline{4}$ ).

The mechanism of the reaction of tetraketones  $\underline{1}$  with mercaptan presumably involves the reductive elimination of the  $\alpha$ -hydroxy group in the cyclic form  $\underline{1}b$  of the ring-chain tautomerism in the 1,3,4,6-tetraketone series.