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# REACTIONS OF 1,3-DIOXACYCLANES WITH SULPHURY COMPOUNDS

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# REACTIONS OF 1,3-DIOXACYCLANES WITH SULPHURY COMPOUNDS

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Saturated 1,3-dioxacyclanes under acid catalysis conditions react with thiols forming thioacetals and glycols. The effect of the type of catalysts, structure of reagents and regime parameters on the direction and selectivity of the process was studied.

The application of sulphurated hydrogen permits to obtain with high selectivity sulphury heterocycles-trithian and their derivatives.

It was shown kinetically that the splitting of heterocycle along acetal carbon-oxygen bond takes place in the limiting reaction step.

By adding RSH ( R=H alkyl, aril ...) along double carbon-carbon bond 1,3-dioxacyclanes containing a substituent on the side bond are synthesized.

Conditions and catalysts are found which permit to minimize heterocycle fragmentation processes.

Under acid catalysis conditions competition of addition and fragmentation processes are observed.

The results of quantum-chemical calculations are qualitatively coordinated with experimentally established facts.