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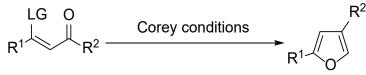
EXTENDED COREY-CHAYKOVSKY REACTION AS A PATHWAY FOR THE SYNTHESIS OF SUBSTITUTED FURANS.

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Abstract. Furans play an important role in modern organic and medicinal chemistry. They exhibit versatile reactivity and are used as multifunctional building blocks for the synthesis of various organic compounds.

It is well known that the Corey-Chaykovsky reaction is quite often used for the synthesis of epoxides by treating the corresponding ketones with sulfoxonium or sulfonium ylides. We proposed to introduce the concept of an extended version of Corey-Chaykovsky. This innovation implies the use of the former threemembered rings as intermediate products, not final ones [1]. Introducing an additional functional group at the β -position of the ketone will embarrass attack at the β -carbon atom and makes the possible process of the furan core aromatization *via* elimination of leaving group.



The report will consider the features of the key transformations; the influence of reaction conditions, steric and electronic factors on the efficiency of cyclization reactions and the yields of target products.

Refences

1. Fadeev, A.A.;, Makarov, A.S.; Ivanova, O.A.; Uchuskin, M.G.; Trushkov. I.V. Org. Chem. Front., 2022, 9, 737-744

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