

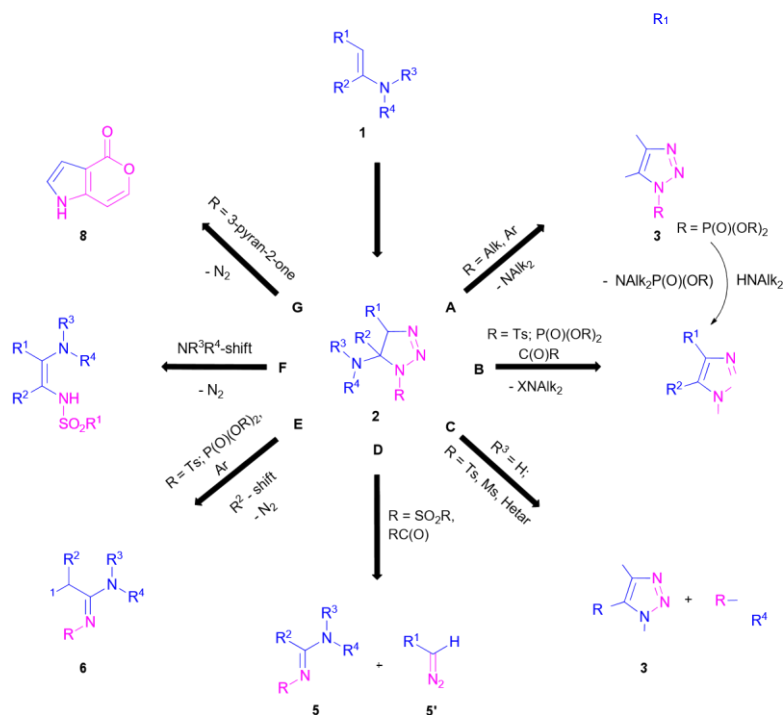
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SYNTHESIS AND REACTIVITY OF AZIDES TOWARDS ENAMINES

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Abstract. Enamines exhibit exceptionally high reactivity in their 1,3-dipolar cycloaddition reactions with azides in comparison with other dipolarophiles. This report includes the reactions of various types of enamines with azides of different nature, including catalytic processes.¹ The initial products of the reaction, i.e. 1,2,3-triazolines are generally unstable and very reactive compounds which are prone to undergo various ring transformations. This provides the background for new synthetic methods and novel reaction types. The formation of a variety of products, mono-, di- and tri-substituted 1,2,3-triazoles, including unsubstituted derivatives, fused, conjugated and spiro heterocycles, two types of amidines, diaminoalkenes derived from the reaction of enamines with azides are classified according to the type of stabilization/ transformation of the intermediate triazolines.

References

1. Bakulev, V. A., Beryozkina, T., Thomas, J., et al. (2018). The Rich Chemistry Resulting from the 1,3-Dipolar Cycloaddition Reactions of Enamines and Azide. *Eur. J. Org. Chem.*, Iss. 3, pp. 262–294.

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