

## III-38

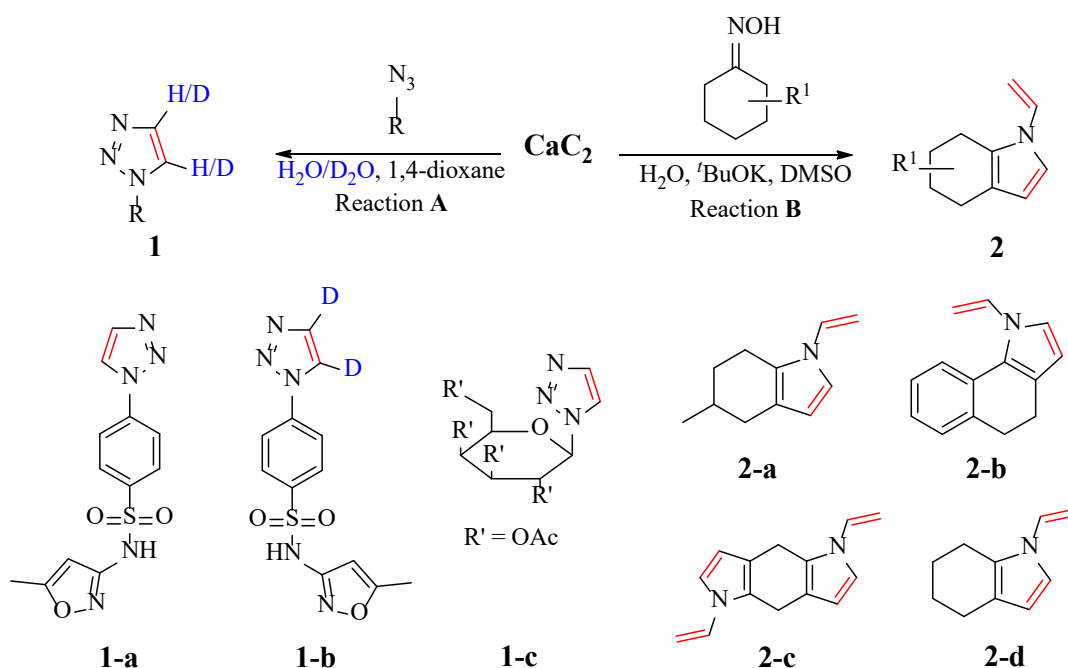
## CONSTRUCTION OF FIVE-MEMBERED HETEROCYCLES USING CALCIUM CARBIDE

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**Abstract.** Calcium carbide is a multifunctional reagent for organic synthesis. Calcium carbide is an easy-to-dose solid acetylene source, which has been applied in a wide variety of chemical transformations [1]. Using calcium carbide as a surrogate of acetylene, a range of vinyl derivatives, substituted alkynes, triazoles, pyrroles, pyrazoles, and other heterocyclic compounds was successfully synthesized [1-3].

In our research calcium carbide was applied for the construction of pyrrole and triazole cycles. An interaction of functionalized azides and calcium carbide led us to synthesize triazoles **1a-c** (reaction A). Reacting with cyclic oximes, calcium carbide transformed to vinylpyrroles **2a-d**, included into bi- or tricyclic systems (reaction B).

**References**

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*Acknowledgments.* This work was supported by the Grant Council of the President of the Russian Federation (MK-2615.2021.1.3).