Some Particularities of Reactions of Coumarines and 3-Ethoxycarbonylcoumarine with Carboranyl-containing Nitonates

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This work is to extend the previous studies [1, 2] the purpose of which was to synthesize new functional derivatives of carboranes with the potential to have biological activity and to develop on their basis efficient medicines with the given range of activity. In this regard, we studied interaction of coumarine and 3-ethoxycarbonylcoumarine with nitronates.

Carboranyl-containing nitronate (1) formed with high yields in reaction of nitrostyrol and lithiumcarboranes were found to react easily with activated double bond of coumarine and carboranyl-containing nitroderivatives of benzo-4H-pyranes (2) and (3).

The structures of the compounds synthesized (2) and (3) were confirmed by IR- and NMR- ¹H spectral data.

Ref.

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- [2]. A.V. Kazantsev, S.M. Adekenov, Zh. Org. Khim., 2002, v. 38, p. 1691-1696.