THE SYNTHESIS OF NEW HETEROCYCLIC SYSTEMS BASED ON N-ETHYL-*1H*-BENZO[c][2,1]THIAZIN-4-ON-2,2-DIOXIDE

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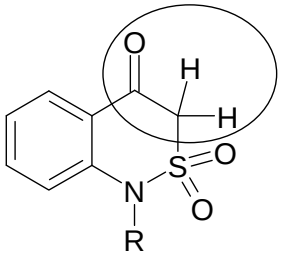
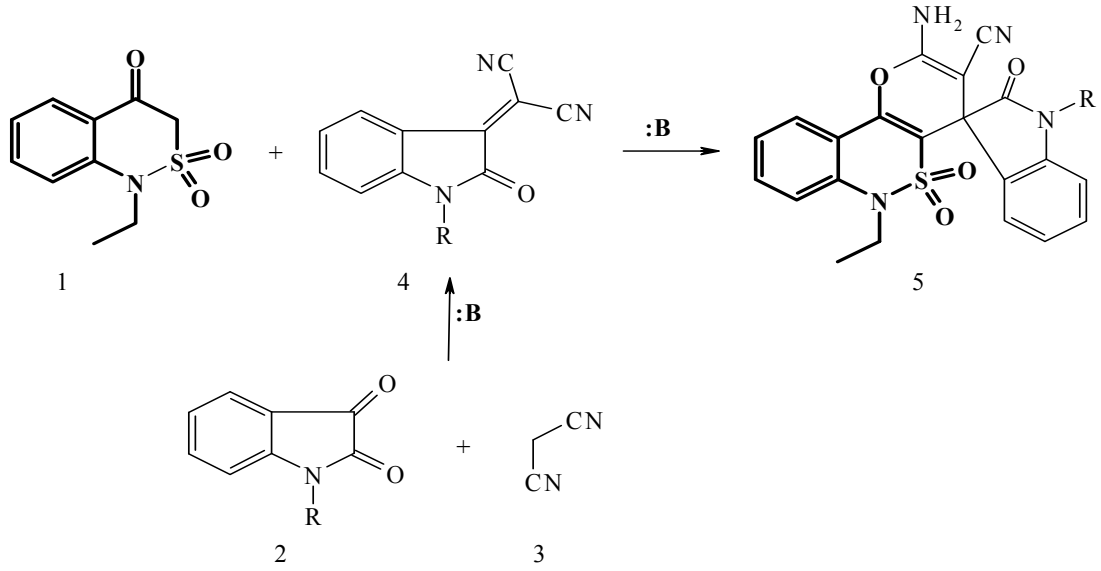
The aim of this work is synthesis of new heterocyclic systems – derivatives of benzo[c][2,1]thiazine. The presence of active methylene and carbonyl groups in the molecule of benzo[c][2,1]thiazine-4-on-2,2-dioxide makes it very convenient and perspective synthone for new heterocyclic systems building based on it.



The starting benzothiazinone (1) was obtained as it was reported in literature. The synthesis of heterocyclic system (5) is based on reaction between benzothiazinone (1) and □-cyanoethylene derivatives of isatin (4). The latest were obtained as a result of the Knoevenagel condensation between N-substituted isatines (2) and malonodinitrile (3). After that, the products of condensation (4) and starting compound (1) were introduced into Michael reaction. As a result of their interection in the presence of base the target compounds (5) were obtained.



1 4 5

2 3

R = H, Me

The structures of target compounds (5) were confirmed using the instrumental methods of analysis (^{1}H NMR, ^{13}C NMR, X-ray).