Halogen Cyclization of 2-(2-Cycloalkene-1-yl)anilines – the Cyclization Methods of Construction of Benzcondensed Heterocyclic Systems

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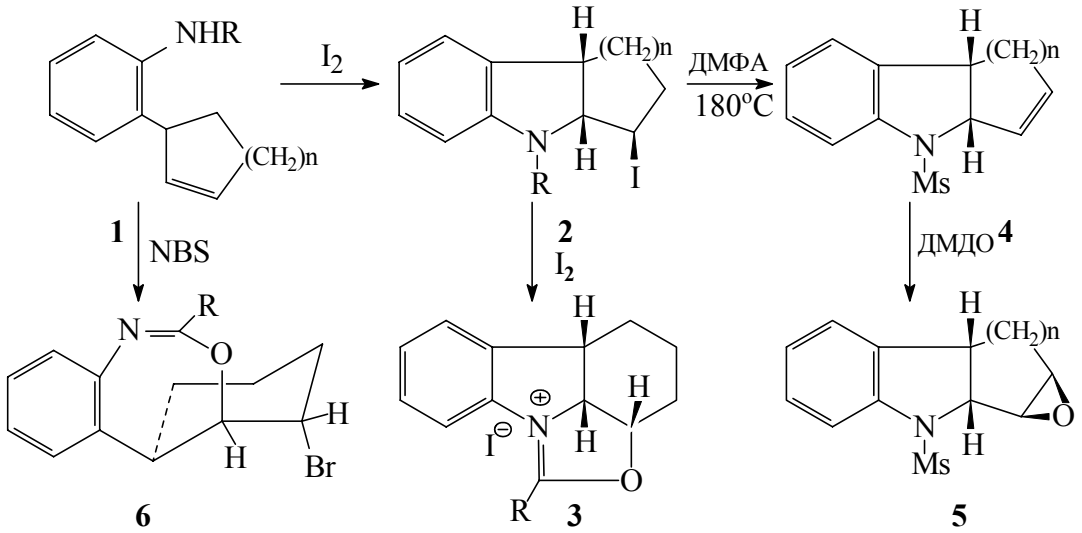
Heterocyclic compounds of the indol series are the key elements for the synthesis of biologically active compounds. To cyclize 2-(2-cycloalkene-1-yl)anilines (**1**) molecular iodine and NBS has been used. It was found, that both 5-exo-and 7-exo-cyclizations occur. Then obtained compounds **2** transform to tetracycles **3** with practically quantitative yield. Mesylates **2** form hexahydrocycloalk[b]indols **4** under heating in DMFA, the latter interact with dimethyl dioxirane with high stereoselectivity to give epoxides **5**. The reaction of NBS with amides 1 results in the formation oxasepines **6** in a high yield.



где, R=Bz, Me.

The composition and structure of compounds obtained was confirmed using elemental analysis and spectral methods.