Thematic Section: Preparative Chemistry. **Full Paper**
Subsection: Organic Chemistry. *Registration Code of Publication:* 13-33-1-55
Publication is available for discussion in the framework of the on-line Internet conference "*Butlerov readings*".
http://butlerov.com/readings/
Contributed: January 28, 2013.

Functionalization of the pyrrol ring in naphtho[1,2,3-*cd*]indol-6(2*H*)-ones

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Keywords: *aminomethylation, 1-amino-2-methylnaphtho[1,2,3-cd]indol-6(2H)-one, 1-nitro-2-methylnaphtho[1,2,3-cd]indol-6(2H)-one, 1-chloroacetylamino-2-methylnaphtho[1,2,3-cd]indol-6(2H)-one, nucleophilic substitution, functionalization of naphtho[1,2,3-cd]indol-6(2H)-one.*

Abstract

The functionalization of the pyrrol ring in naphtho[1,2,3-*cd*]indol-6(2*H*)-ones was studied. The reaction of nucleophilic substitution of nitro group in 1-nitro-2-methylnaphtho[1,2,3-*cd*]indol-6(2*H*)-one under the influence of arenols, arentiols and mercaptoacetic acid was examined. The aminometylation of naphtho[1,2,3-*cd*]indol-6(2*H*)-one to give *N*-substituents of naphtho[1,2,3-*cd*]indol-6(2*H*)-one proceeds by the atom of nitrogen. Based on 1-amino-2-methylnaphtho[1,2,3-*cd*]indol-6(2*H*)-one and cloroacetyl chloride we obtained 1-chloroacetylamino-2-methylnaphtho[1,2,3-*cd*]indol-6(2*H*)-one. The chlorine atom in 1-chloroacetylamino-2-methylnaphtho[1,2,3-*cd*]indol-6(2*H*)-one was substituted by secondary amines.