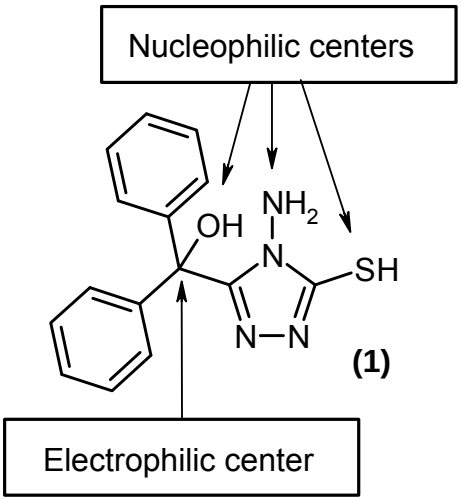
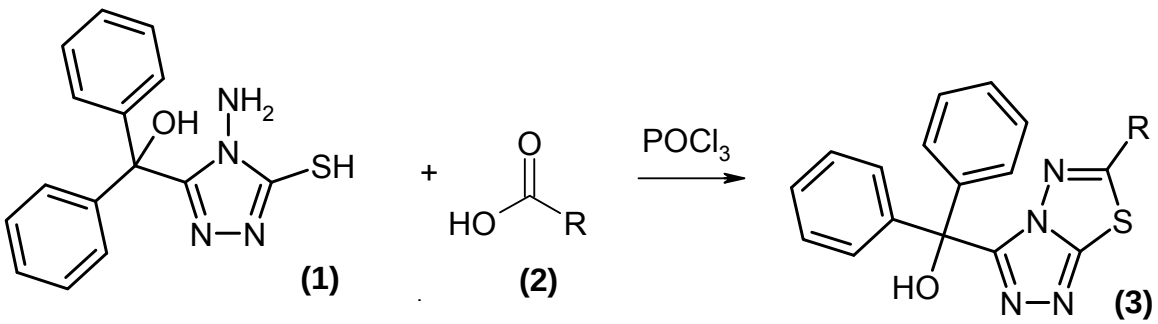
STUDYING OF INTERACTION (4-AMINO-5-MERCAPTO-4H-[1,2,4]TRIAZOL-3-YL)-DIPHENYLMETHANOL WITH ELECTROPHILIC REAGENTS

Lysyana A.A., Sytnik K.M., Shpychak T.V., Chernykh V.P.
The National University of Pharmacy, Kharkiv, Ukraine
sytnikm@mail.ru



Previously, we reported the preparative pathways for (4-amino-5-mercapto-4H [1,2,4] triazol-3-yl) -diphenylmethanol. Mentioned compound contains in its structure diphenylcarbinol fragment, which also present in the structures of many medicinal substances and may be considered as pharmacophore. We noted that (4-amino-5-mercapto-4H-[1,2,4]triazol-3-yl)-diphenylmethanol contains several reaction centers, what causes high perspectives of its chemical modification aimed to formation of combinatorial libraries of substances with diphenylcarbinol fragment as pharmacophore. Thus, we decided to study the interaction of (4-amino-5-mercapto-4H[1,2,4]triazol-3-yl)-diphenylmethanol **(1)** with electrophilic reagents, namely functional derivatives of carboxylic acids. It is known that the interaction of the 4-amino-5-mercapto-4H-[1,2,4]triazole with acyl halides leads to the formation of heterocondensed 1,2,4-triazolo [3,4-b]thiadiazole. We modified this method applied to (4-amino-5-mercapto-4H[1,2,4]triazol-3-yl)-diphenylmethanol. Thus, series (6-R-[1,2,4]-triazolo[3,4-b][1,3,4]thiadiazol-3-yl)-diphenyl methanol were obtained.



The structures of all synthesized compounds were confirmed by modern instrumental methods.