

The synthesis and study of some of adamantane-fragment containing heterocycles.

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Aim of the research project is the development a synthetic method for adamantane-fragment containing some heterocyclic compounds. Studying of effect of electron donor radical of adamantane on reaction capacity and specific biological activity of compounds.

Adamantane order derivatives were synthesized and accumulated: Adamantanecarboxylic acid, 3-hydroxyadamantane-1-carboxylic acid, 3-chloroadamantane-1-carboxylic acid, acetaminoadamantane-1-carboxylic acid, acetaminophenyladamantane-1-carboxylic acid and their corresponding amino acids.

Were obtained and purified benzoyl-o-phenylenediamine hydrochloride, 4-nitro-o-phenylenediamine, 4-methoxy-2-nitroaniline.

2-nitroacetaminoadamantane-1-carboxylic acid, N-benzoylaminoadamantane-1-carboxylic acid, N-adamantyl-3,4-diaminobenzophenon, N-(3-chloroadamantyl)-o-phenylenediamine, N-(3-chloroadamantyl)-2-nitroaniline, N-(acetaminophenyladamantyl)-o-phenylenediamine and also benzimidazoles: 2-(2-hydroxyphenyl)benzimidazole and 2-(3-nitrophenyl)benzimidazole were synthesized.

The structure of some synthesized compounds was determined by IR, ¹H NMR, ¹³C NMR spectral data.