ABSTRACT

Electrochemical synthesis of methyl 2,5-dimethoxy-2,5-dihydrofuran-2-carboxylate. Burlachuk AR - Kyiv: "KPI them. Igor Sikorsky », CTF, gr. ChE — 91mp Master's dissertation, 2021, number of pages - 90, figures - 39, tables –3, sources –36

In the master's dissertation the literary search of existing ways of creation and development of medicines is carried out. The main building blocks for drug synthesis are considered, on the example of pyrrole and pyridazine. Their properties, functionalization and various methods of synthesis are described. A study on the stability of the reaction product in different conditions of electrolysis. Appropriate electrolysis parameters have been selected to maximize process simplification. The product of the electrochemical reaction, methyl 2,5-dimethoxy-2,5-dihydrofuran-2-carboxylate, was reduced to methyl 2,5-dimethoxytetrahydrofuran-2-carboxylate to confirm hypothetical assumptions regarding the use of the electrolysis product.

All reaction products were investigated by NMR at the facilities of LLC RPE "UKRORGSYNTEZ".

KEYWORDS: FURAN OXIDATION, ELECTRODE MATERIALS, METHYL-2,5-DIMETHOXY-2,5-DYHYDROFURAN-2-CARBOXYLATE, CATALYTIC PYLADINE, PYRROLE.