

The thesis topic:

Optimization of photochemical preparation of hydrogen peroxide for laboratory of inorganic chemistry

Abstract:

This Bachelor thesis deals with compound of hydrogen and oxygen, hydrogen peroxide.

The theoretical part of thesis deals with basic physical and chemical characteristic of hydrogen peroxide, its preparation and last but not the least its production.

The practical part of thesis deals with two main laboratory preparations of hydrogen peroxide. First, from barium peroxide sequential reaction with hydrochloric acid, sulphuric, carbonate leader.

Second, from anthraquinone dissolved in toluene by photochemical reduction isopropylalcohol and following oxidation mixture of air oxygen.

The aim of thesis is implementation of those two methods, finding out the pros and cons and their comparison mainly from the point of preparation effectiveness and possibility of use in laboratories of inorganic chemistry.

Keywords:

hydrogen peroxide, anthraquinone, photochemical reduction, toluene, isopropylalcohol