The use of green chemistry in experimental teaching

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Abstract

This thesis contains basic information about conduction of safe and ecological chemical experiments. The aim of this paper is to demonstrant, that experiments can be conducted in environmentally friendly way. This information is suitable for elementary school students, high school students and lectors with basic knowledge of chemistry.

Theoretical part of this thesis is aimed at explanation of "Green chemistry" and general principles of selected experiments. Differences between ecological and convetional form of experiments are also explained. Execution of pedagogical experiments aimed at researching green chemistry experiments efficiency is covered in practical part of this thesis. Photos of experiments and questionnaires filled by students, who conducted those experiments are attached to the thesis.

The result of this thesis is a comprehensive compilation that presents students and teachers with experiments that, with the help of more refined chemicals, can be done as efficiently as using the original starting substances. The conclusion of the thesis is an overall summary of the teaching of chemistry for high schools with the help of chemical experiments.

Keywords

Green chemistry, experiments, ecology