Abstract

This master's degree thesis, called *Nuclear Chemistry and Chemistry of f-Elements in Chemistry Curriculum at Secondary Schools*, conducts a research of the most commonly used high school textbooks. Within the textbook research, topics such as atomic nucleus composition, radioactivity, and f-elements were studied in order to evaluate to what extent contemporary textbooks meet to the curriculum requirements. Based on the textbook research, the new teaching texts, materials, and teaching tasks including the uncovered themes were created. Selected teaching tasks were evaluated by high school teachers. Within this pool, the teachers also answered questions concerning teaching topics of radioactivity and chemistry of f-elements at high schools. The same tasks were solved and evaluated by high school students as well. The results of both teacher and student surveys were used for the final modification of the tasks.