

ABSTRACT

This bachelor thesis deals with a proposal of a sequence of chemical reactions involving magnesium. These chemical reactions are used for an educational experiment aimed on secondary school students. The proposed experiments strive to enrich incomplete or missing information in secondary school textbooks. This fact resulted from the analysis of such textbooks. In the thesis, there are information about the chemistry of magnesium, about the nature of observed phenomena, about the safety in laboratory, and there are descriptions of six experiments with magnesium to be carried out after each other. These experiments show the properties of magnesium during burning in air, and thus refute or confirm hypotheses of secondary school students. The student feedback is obtained by using the IMI questionnaire, which is described in a separate chapter. The thesis also contains comments including the methodology for the teacher and student worksheets.