

**Title:** Chemistry - Physics Relatives in the Science Education

**Department:** Department of Teaching and Didactics of Chemistry

**Abstract (in English):**

Within the master's degree thesis was conducted a literary research. Overview of interdisciplinary relatives in science education was done based on this research. The interdisciplinary relatives are described in the work as well as a historical development of integrated science education in the Czech Republic and in Europe. Three teaching tasks were created for use in science lessons with the following topics: The universe evolution and formation of elements, Luminescence, and The substance composition. Teaching tasks can be used during the class work or as a material for talented students and have both theoretical and practical parts. The teaching tasks were evaluated by teachers who used them during their chemistry lessons. The final part of the master thesis is a survey, in which teachers answered the questions concerning the establishing of new conference called "Chemistry Teachers' Inventions Fair" for secondary school and high school teachers.

**Keywords:** interdisciplinary relatives, physics, chemistry, science education, integrated teaching