Abstract:

This dissertation deals with the creation of educational materials to topics from the field Chemistry around us and circumstances of its implementation into teaching chemistry with regard to the needs posed by curricular documents. The connection between real world and the content of the chemistry subject, which is taught at schools, is shown on the curricular topics related to medicinal chemistry and to fertilizer chemistry. This could make the student getting a better overview of the subject itself.

Regarding the specialist and didactical part, the teaching material tries to make it easier for the teacher to prepare for the lessons and make them more interesting due to the teaching material’s variability and processing (teaching text, powerpoint presentations, plays, laboratory exercises etc.). This way, the student gains access to practical topics through various types of exercises, interesting aspects, plays etc.

The evaluation of educational materials and investigation of student’s and teacher’s attitude was carried out via a questionnaire investigation. The investigation showed that both students and teachers regard these topics as beneficial and belonging to the field of chemistry. The medicinal topics were approached by the girls better than by the boys, which was not the case of the fertilizer issue. The prepared educational materials were regarded by most students and teachers as suitable. So it can be assumed they can be applied in educating students at secondary schools.