5 SUMMARY

The topic of my thesis is „Integration of biological knowledge into the chemical education“. The integration and the interdisciplinarity of the natural sciences in education is the challenging goal in the contemporary Czech education.

The main aim of the thesis is the integration of two important sciences – biology and chemistry in three secondary cross-curricular topics:

1. Photosynthesis;
2. Nucleic Acids and Genome;
3. Influence of Selected Chemical Elements for Environment and Human Organism.

I proposed three different methods of teaching for these topics: the exposition with PowerPoint’s presentation (for the topic number 1), the lecture for two teachers (for the topic number 2) and the cross-curricular project’s teaching (for the topic number 3). I created new educational materials for teachers – the PowerPoint’s presentation, educational games and different types of questions (multiple-choice questions, structured questions and problems).

Important part of the thesis is so the questionnaire for teachers of chemistry at high schools.