

Abstract

The diploma thesis deals with the topic of lipids and it is focused on the processing in the form of educational materials (educational text and educational animations) for chemistry and biology on secondary school. It is divided into two parts. The theoretical part defines the key concepts serving as theoretical background: interdisciplinarity, visualization, animation. There is also performed the analysis of RVP G and the representation of the topic of the diploma thesis in this curricular document. The final chapter of the theoretical part is dedicated to determining the criteria for the analysis of the educational materials and the characteristics of the animation program Adobe Animate CC. The analysis of available educational materials is performed according to predetermined criteria in the practical part, specifically animations available on the Internet. There are also introduced the educational materials so as the complex file of educational animations created in the program Adobe Animate CC and the educational text that serves as a guiding material to educational animation program. The materials include methodological guide for users. The created materials focus on the topic of the lipids and biological membranes, they emphasize interdisciplinarity of chemistry and biology and also connect knowledge from both of these subjects.