

Abstract

This thesis deals with the issue of creating materials for teaching chemistry in virtual reality, specifically in the virtual environment of Nanome software. The theoretical part deals with the general issues of learning, virtual reality and its possible use in teaching. The most comprehensive part is devoted to the professional program Nanome, its environment and tools. Its strengths are the visualisation of molecules and the possibilities to interact with them or even create them, which have been chosen as the basis for activities for the lessons. The practical part presents a template already created, which could be used to create further learning activities according to the teacher's ideas. The content of each learning task and the molecule models created consist of two essential parts – a macro programmed in Lua and a prepared presentation. Using the designed template, high school students aged 17-19 created and tested three specific learning tasks for feasibility.