

Abstract

Bachelor thesis deals with creation of user Raman spectra database and mapping of the availability of commercial and freely accessible Raman libraries. To measure the spectra of the user database FT-Raman spectroscopy was used and also was used the possibility to download spectra freely available on the website of the Sigma-Aldrich company. Created database contains the Raman spectra of 160 organic and inorganic substances. The database was then tested on three samples of different types of analgesics-antipyretics. It was the determination of the composition of Anopyrin from Zentiva, Bayer Aspirin and Paralen Plus from Zentiva. The optimal search setup was discussed on the basis of the results.