Abstract

The topic of my bachelor´s thesis is using of two methods of vibrational spectroscopy – infrared and Raman spectroscopy, which were used for determination of methanol in liquors.

Spectroscopic methods should very effectively help in cases of control of unknown or suspect liquors. Determination of dangerous methanol from units to tens percentage is very quick and appropriately precise for the reason.

There were prepared several samples with difference volume assay of methanol and ethanol in practical part of thesis to receive of total volume concentration of alcohol (methanol and ethanol) – 40 % V/V. The spectrum of each prepared samples were measured by the both methods. For quantitative determination was chosen values of absorbance in characteristic areas for methanol. Furthermore were determined unknown samples of liquor. Unknown samples of liquor with addition of methanol were tested at last.

There was used software OMNIC and TQ Analyst of company Thermo Scientific for quantitative determination.

Keywords : FT-IR spectroscopy, Raman spectroscopy, Omnic a TQ Analyst.