

Quantitative analysis methods using X-ray powder diffraction are still highly actual conception in the area of research of modern materials. The Reference Intensity Ratio (RIR) method is used here for quantitative analysis by X-ray powder diffraction of model samples in this bachelor thesis. The model samples are three mixtures of corundum, mullite and calcite. To get diffraction patterns of the mixtures, two different diffractometers are used and their outputs are then compared.