

## INVESTIGATION OF ABSORPTION SPECTRA OF CHROMIUM HEXACARBONYL ( $\text{Cr}(\text{CO})_6$ )

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The purpose of this work is to study the absorption spectra of adsorbed layers of chromium hexacarbonyl. The absorption spectra of the adsorbed substance were taken on the SF-56 spectrophotometer, using the optical cell described in the article. The optical cell scheme allows increasing the value of the absorption coefficient. The absorption spectra in the wavelength range of 300–350 nm for air temperatures of 75 °C and 90 °C are given (the temperature was adjusted using the REX-C100 PID thermostat). The paper presents a stand for studying the absorption spectra of adsorbed layers. The results of measuring the absorption spectra of adsorbed layers of chromium hexacarbonyl  $\text{Cr}(\text{CO})_6$  at different temperatures are presented. The graphs of the absorption spectra of hexacarbonyl chromium show the dependence of the absorption coefficient on the number of substrates, the number of substrates varies from 10 to 2.

**Keywords:** absorption spectra, adsorbed layer, chromium hexacarbonyl, optical cell, SF-56 spectrophotometer, absorption coefficient, monomolecular layer

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