

A supplementary material to the paper

Observation of $D(2)^1\Pi \sim (2)^3\Pi \sim (2)^3\Sigma^+$ states in KCs by polarisation labelling spectroscopy technique. Modelling of the $D(2)^1\Pi \sim (2)^3\Pi_1$ system

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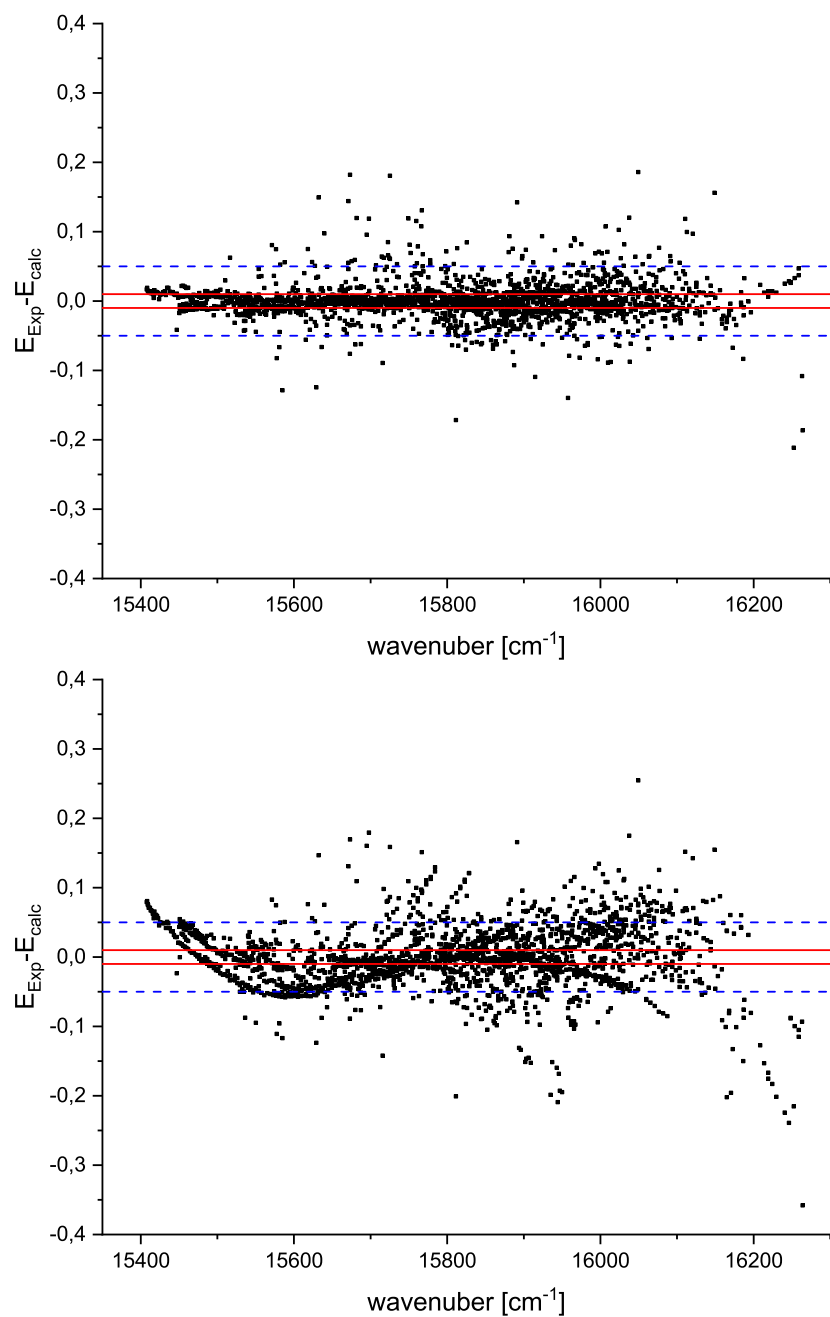


Figure 1: Influence of the number of Dunham-type coefficients on the distribution of residua. In the upper panel result of the fit with 13 Dunham coefficients for the $2^1\Pi$ state and 7 coefficients for the $2^3\Pi_1$ state are given (see Tab.2 in the article). The unweighted root mean square of the fit $rms = 0.029 \text{ cm}^{-1}$. In the lower panel results of the fit with 9 Dunham coefficients for the $2^1\Pi$ state and 7 coefficients for the $2^3\Pi_1$ state are shown. In this case coefficients for which the error of determination was comparable with the value of a coefficient were excluded from the fit, what resulted in rms value 0.047 cm^{-1} . The energy uncertainty of the present PLS experiment ($\pm 0.05 \text{ cm}^{-1}$) is marked with horizontal dashed blue lines and of the LIF experiment ($\pm 0.01 \text{ cm}^{-1}$) [J. Chem. Phys. 142 (13) 134309 (2015)] with horizontal red lines.