Figure 1: Fitted $S_0$ and $S_1$ state effective $\delta$ potentials for $d_1$-2-pyridone-benzene. The $S_1$ barrier is $V_2(S_1)=25.5$ cm$^{-1}$, the $S_1$ state equilibrium angles are $\delta_{\text{min}} = \pm 13.2^\circ$. 