

Supplementary information to Paper: Generation of one  
light-induced metastable nitrosyl linkage isomer in  
 $[\text{Pt}(\text{NH}_3)_4\text{Cl}(\text{NO})]\text{Cl}_2$  in the red spectral range

Dominik Schaniel *et al.*

May 24, 2007

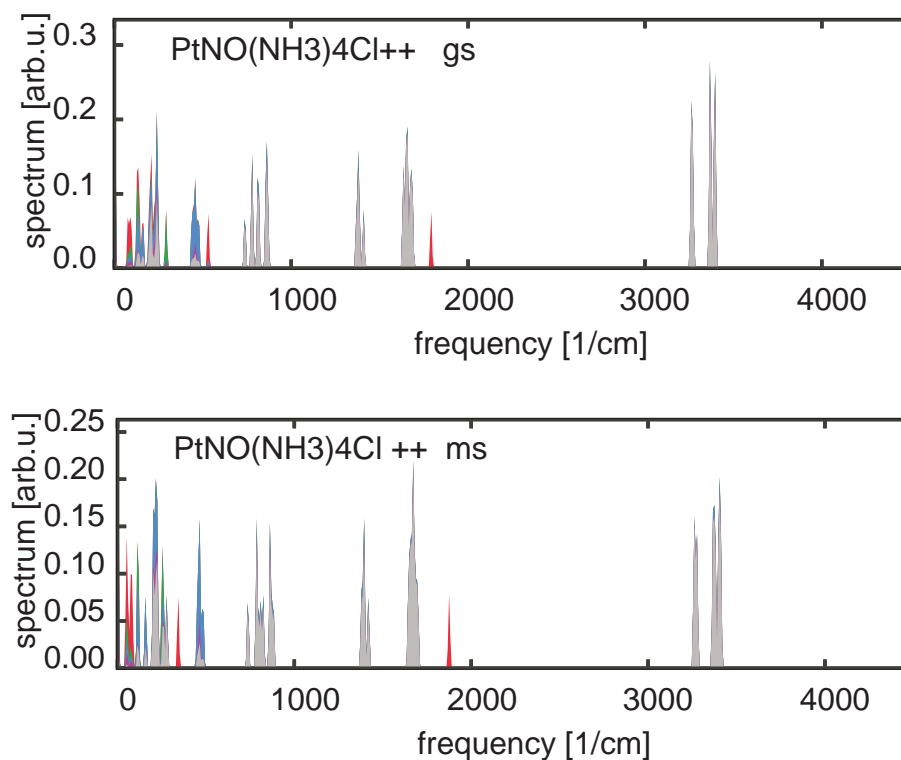


Figure 1: Calculated vibration spectrum of GS and MS in  $[\text{Pt}(\text{NH}_3)_4\text{Cl}(\text{NO})]^{2+}$ . Red color indicates vibrations involving NO. The  $\nu(\text{NO})$  stretching frequency increases from  $1791.1 \text{ cm}^{-1}$  in GS to  $1875.9 \text{ cm}^{-1}$  in MS, while the GS  $\delta(\text{Pt-N-O})$  bending mode at  $530.5 \text{ cm}^{-1}$  decreases by  $187.1 \text{ cm}^{-1}$  to the MS  $\delta(\text{Pt-O-N})$  at  $343.4 \text{ cm}^{-1}$ . Green color indicates vibrations involving Cl, blue and grey color those involving  $\text{NH}_3$ .

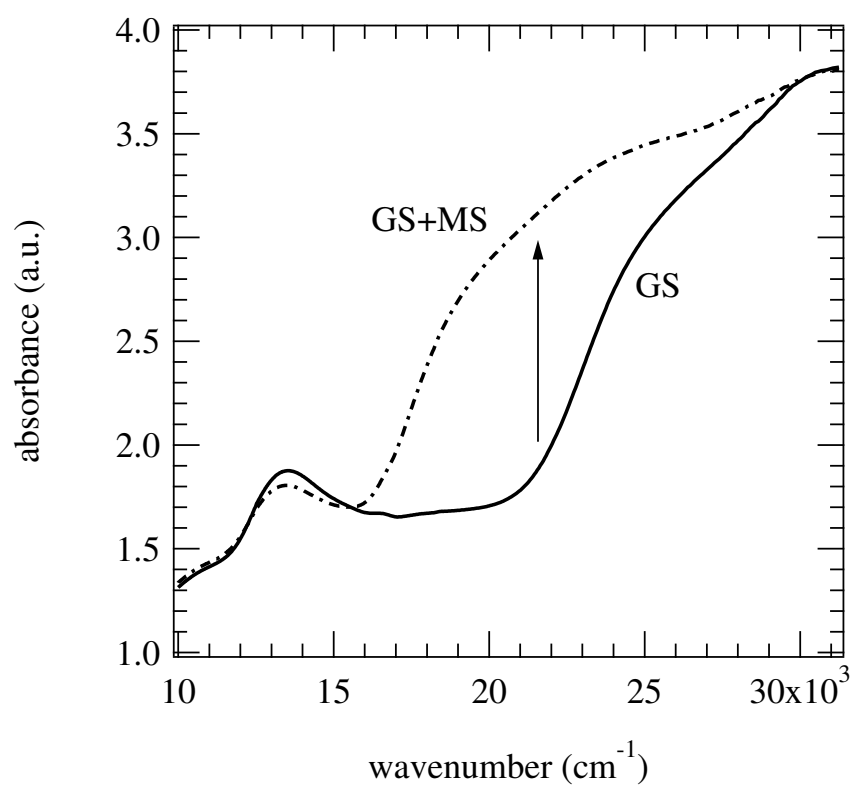


Figure 2: Absorption spectrum of GS (solid line) and GS+MS (dash-dotted line) of  $[\text{Pt}(\text{NH}_3)_4\text{Cl}(\text{NO})]\text{Cl}_2$  embedded in KBr.