Determination of the C(3)$^1\Sigma^+$state potential energy curve in KCs molecule based on polarisation labelling spectroscopy data.

Jacek Szczepkowski, Anna Grochola, Paweł Kowalczyk, Włodzimierz Jastrzębski

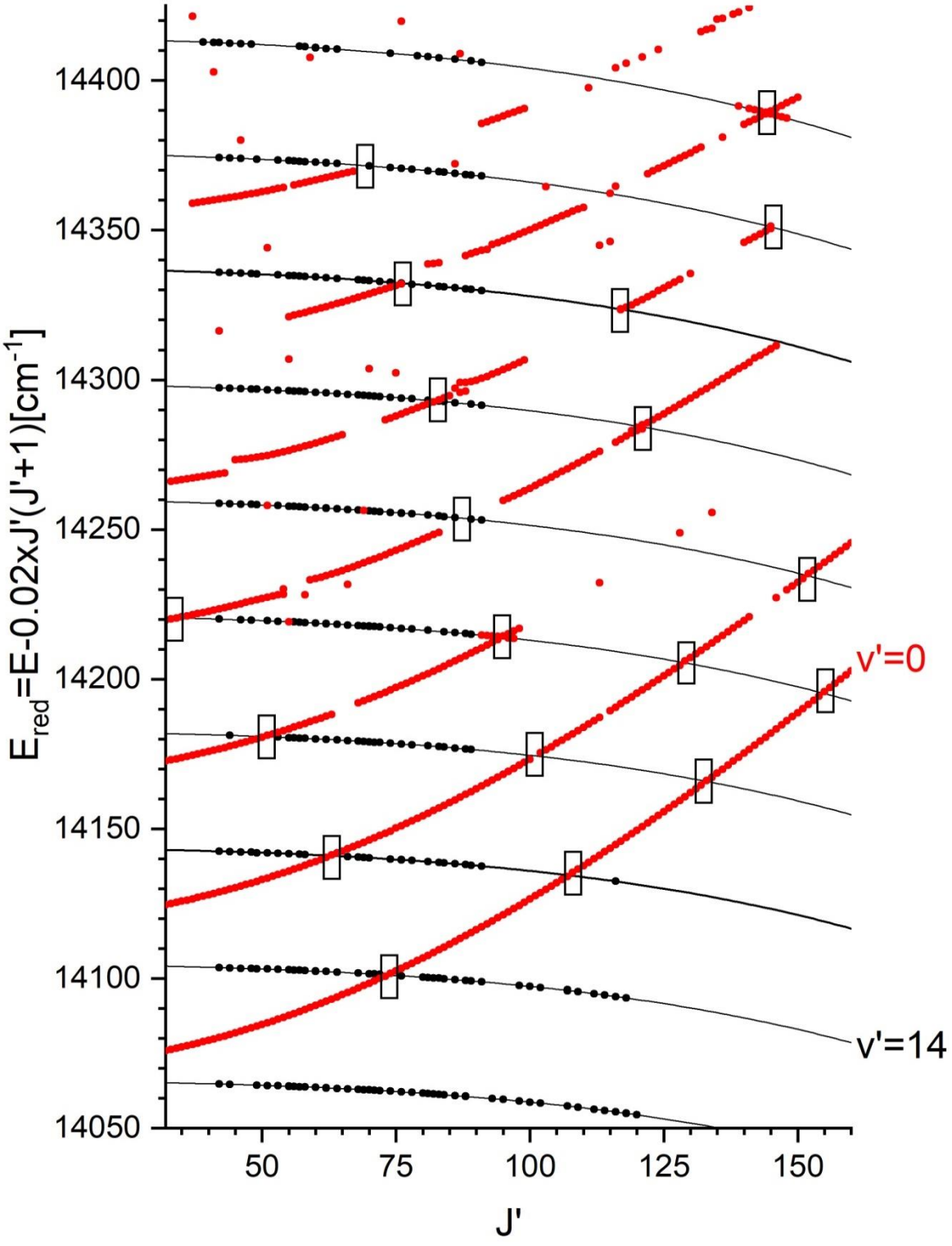

Fig. 6 Reduced energies E_{red}=E-0.02 x J'(J'+1) [cm^{-1}] of rovibrational levels of the C(3)$^1\Sigma^+$ state resulting from the present experiment (black dots), and e-parity rovibrational levels of the B(1) $^1\Pi$ state (red dots) from the Riga group measurements [J. Chem. Phys. **142** (2015) 134309]. The solid lines display positions of consecutive levels of the C(3)$^1\Sigma^+$ state calculated using the potential energy curve obtained in the present work. The black rectangles mark regions of local perturbations due to interactions between C(3)$^1\Sigma^+$ and B(1) $^1\Pi$ states observed either in our experiment or by the Riga group.