

## ROTATIONAL ANALYSIS OF LASER INDUCED FLUORESCENCE DATA FOR Rh<sup>16</sup>O and Rh<sup>18</sup>O

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We recently reported the laser induced fluorescence<sup>a</sup> and dispersed fluorescence<sup>b</sup> spectra for rhodium monoxide. Molecular constants were derived from our rotational analysis of the four 0-0 bands of two  ${}^2\Pi \leftarrow X^4\Sigma$  transitions using jet-cooled ( $J = 15$ ) high-resolution data. We have now extended the analysis to include data from 16 Rh<sup>16</sup>O medium-resolution sub-bands ( $J = 35$ ) arising from the  $v = 0$  level of the ground state. In addition, emission plates from Stockholm, recorded in the 1960s have been examined, extending the analysis to much higher  $J$ . Several bands for Rh<sup>18</sup>O have also been investigated. Spectroscopic parameters from some 3000 assigned lines will be discussed.

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<sup>a</sup>R. F. Heuff, W. J. Balfour and A. G. Adam, *J. Mol. Spec.* **216** 136 (2002).

<sup>b</sup>R. H. Jensen, S. G. Fougere and W. J. Balfour, *Chem. Phys. Lett.* **370** 106 (2003).