

Erratum: (1 +1) resonant enhanced multiphoton ionization via the $A^2\Sigma^+$ state of NO: Ionic rotational branching ratios, and their intensity dependence [J. Chem. Phys. 88, 1516 (1988)]

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Due to a printing error Figs. 3–5 are in the wrong order. Figure 3 should be Fig. 4, Fig. 4 should be Fig. 5, and Fig. 5 should be Fig. 3. The figure captions remain as they are in the paper.

Erratum: Laser induced fluorescence study of the $\tilde{B}^2B_2 \rightarrow \tilde{X}^2A_2$ transition of the furan cation in a supersonic free jet expansion [J. Chem. Phys. 87, 4435 (1987)]

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It has come to our attention that the majority of the strong vibronic structure assigned to transitions in $C_4H_4O^+$ in Ref. 1 are in fact due to vibronic transitions in the $A^1\Pi_u-X^1\Sigma_g^+$ spectrum of C_3 . Comparison of the fluorescence excitation spectrum obtained in the jet expansion with that of C_3 in a rare gas matrix^{2–4} and in the gas phase by flash photolysis of allene and diazopropyne^{5–11} allows the bands in Table I to be assigned to vibrational levels in the $A^1\Pi_u$ state of C_3 as indicated.

Further, the wavelength resolved laser induced fluorescence emission spectra summarized in Table IV of Ref. 1 can be assigned to a large number of bend–stretch modes in the ground electronic state of C_3 . These assignments are given in Table II. The data includes information on the positions of much higher vibrational states of C_3 in its ground state than has previously been reported. We find that, as recently theo-

retically predicted,^{12,13} the bending potential tightens up on excitation of the symmetric stretching vibration but becomes slightly flatter at the effective minimum when quanta of the antisymmetric stretch (ν_3) are excited. The wide range of vibrational levels covered by the data in Table II will provide a good basis for an accurate determination of the potential surface in $X^1\Sigma_g C_3$.

A few of the bands indicated in Table I are not obviously assigned to transitions in the cold C_3 molecule and it is possible that some of them together with other, weaker, bands not previously reported are due to $C_4H_4O^+$. Assignment will require considerable additional work. One remaining discrepancy is in the reported lifetime of the $A-X$ emission in C_3 found to be 200 ± 10 ns previously while 330 ns was reported in Ref. 1.

A note concerning the differences seen the adiabatic ion-