## Addendum

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# THE HOMOGENEOUS RATE CONSTANT FOR THE RECOMBINATION OF FLUORINE ATOMS WITH $F_2$ AS THE THIRD BODY

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Page 455, the following text should be added to the above paper, to appear before the acknowledgement.

The homogeneous recombination rate constants, $k_g$, were defined by an equation of the form,

$$-\frac{dP_F}{dt} = k_g P_F^2 P_M,$$

where $P_F$ and $P_M$ are the partial pressures of F-atoms and the third bodies respectively. A more correct and usual definition of the rate constant, $k_g$, is made by replacing $k_g$ with $2k'_g$ to account for the fact that two F-atoms are removed for every effective collision. In order to be consistent with the usual definition, the rate constant should be reported as $k'_{F_2} = (1.8 \pm 0.7) \times 10^{14}$ cm$^6$ mol$^{-2}$ s$^{-1}$, and the usual definitions must be used when making comparisons with literature values, as was done in the last paragraph. Our value of $k'_{He}$, $(1.10 \pm 0.05) \times 10^{14}$ cm$^6$ mol$^{-2}$ s$^{-1}$, is a factor of two less than Ultee's value of $(2.18 \pm 0.4) \times 10^{14}$ cm$^6$ mol$^{-2}$ s$^{-1}$ and our value of $k'_{Ar}$, $(1.05 \pm 0.35) \times 10^{14}$ cm$^6$ mol$^{-2}$ s$^{-1}$, is substantially greater than Ganguli and Kaufman's value of $(2.9 \pm 0.2) \times 10^{13}$ cm$^6$ mol$^{-2}$ s$^{-1}$.