

ADDITIONS AND CORRECTIONS

2009, Volume 113A

Denisio M. Togashi,* Boguslaw Szczupak, Alan G. Ryder, Amandine Calvet, and Muireann O'Loughlin: Investigating Tryptophan Quenching of Fluorescein Fluorescence under Protolytic Equilibrium

Page 2757. On publication of our work, Prof. M. Tachiya brought to our attention his recent findings. While reviewing his comments, we noted some errors in our reported values. These corrections do not affect the discussion or the conclusions of our original paper. Please find below the corrections to our work.

On pg 2764, eq 7 should be

$$w(r,I) = \frac{z_F z_T e^2}{2\epsilon r} \left[\frac{\exp(\beta\sigma_F\sqrt{I})}{1 + \beta\sigma_F\sqrt{I}} + \frac{\exp(\beta\sigma_T\sqrt{I})}{1 + \beta\sigma_T\sqrt{I}} \right] \exp(-\beta r\sqrt{I}) \quad (7)$$

On pg 2765, in Table 3, the last three columns should be replaced by

TABLE 3

$k_{el}/10^9 \text{ s}^{-1}$	$-\Delta G^0/\text{eV}$	H_{FT}/cm^{-1}
7.23–6.67	0.63	44.6
6.19–6.07	0.69	30.2
4.08–3.99	0.68	20.7
2.45–2.30	0.67	17.1
4.72–4.53	0.88	10.1

The correct values are highlighted in bold. Note that, in the corrected values for the free energy (ΔG^0), work terms are introduced; these work terms are based on the average for the respective ionic strength range of the quencher concentration. Previously, we incorrectly underestimated the electronic coupling (H_{FT}) values by a factor of $10^{1/4}$.

As an aside, please note that Wojcik and Tachiya propose that the generally accepted Eigen equation description for the dissociation of the pair is incorrect.¹ The Wojcik and Tachiya work means that the dissociation rate constants (k_{-d}) values are overestimated by a factor of 3. If we consider this work, then the values for k_{el} and H_{FT} values in our work would be overestimated by 3 and $3^{1/2}$, respectively. We foresee elaborating further on this in our future studies.

Acknowledgment. We thank Prof M. Tachiya for his kind comments on our work and for calling attention to the Eigen model correction.

References and Notes

- (1) Wojcik, M.; Tachiya, M. *J. Chem. Phys.* **2009**, *130*, 104107.

10.1021/jp904494p

Published on Web 06/02/2009