



Correlating Molecular Orientation Distributions and Electrochemical Kinetics in Subpopulations of an Immobilized Protein Film [Journal of the American Chemical Society 2008, 130, 1572–1573. DOI: 10.1021/ja710156d]. Zeynep Ozkan Araci, Anne F. Runge, Walter J. Doherty, III, and S. Scott Saavedra\*

Page 1573. Electron transfer rate constants were determined using PM-ATR in TM and TE polarizations on cytochrome c films. The stated constants are incorrect because the linear frequency was mistakenly used instead of the angular frequency in the equation given,  $k^0 = 0.5\omega^2R_sC_{\rm dl}$ . The difference is a factor of  $(2\pi)^2$ . The correct rate constants in TM and TE polarizations are  $k^0_{\rm TM} = 160 \pm 20~{\rm s}^{-1}~(n=3)$  and  $k^0_{\rm TE} = 48 \pm 8~{\rm s}^{-1}~(n=3)$ , respectively. The discussion of the physical basis for  $k^0_{\rm TM} > k^0_{\rm TE}$  is still valid. However, the statement that  $k^0_{\rm CV}$ , the rate constant determined using cyclic voltammetry, is intermediate between  $k^0_{\rm TM}$  and  $k^0_{\rm TE}$  is incorrect; the corrected TE and TM rate constants are about 15- and 50-fold greater, respectively (see Supporting Information for an explanation).

## **■ ASSOCIATED CONTENT**

Supporting Information. A discussion that addresses why rate constants measured using PM-ATR are greater than those measured using CV. This material is available free of charge via the Internet at http://pubs.acs.org.

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