

**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,  $k^0 = 0.5\omega^2 R_s C_{dl}$ . The difference is a factor of  $(2\pi)^2$ . The correct rate constants in TM and TE polarizations are  $k^0_{TM} = 160 \pm 20 \text{ s}^{-1}$  ( $n = 3$ ) and  $k^0_{TE} = 48 \pm 8 \text{ s}^{-1}$  ( $n = 3$ ), respectively. The discussion of the physical basis for  $k^0_{TM} > k^0_{TE}$  is still valid. However, the statement that  $k^0_{CV}$ , the rate constant determined using cyclic voltammetry, is intermediate between  $k^0_{TM}$  and  $k^0_{TE}$  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

**S 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>.

DOI: 10.1021/ja2057049

Published on Web 08/03/2011