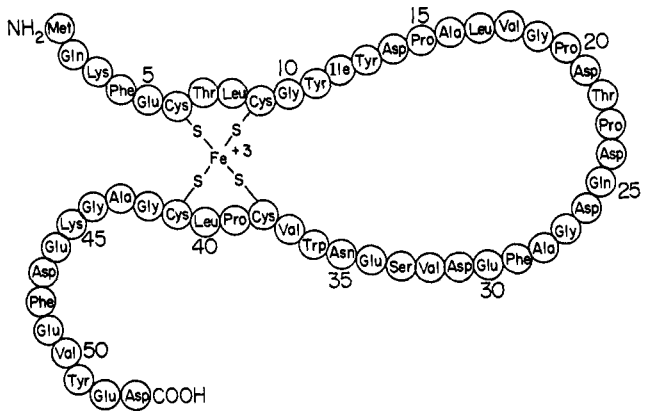

Figure 1. The amino acid sequence of the rubredoxin from *Micrococcus aerogenes*.

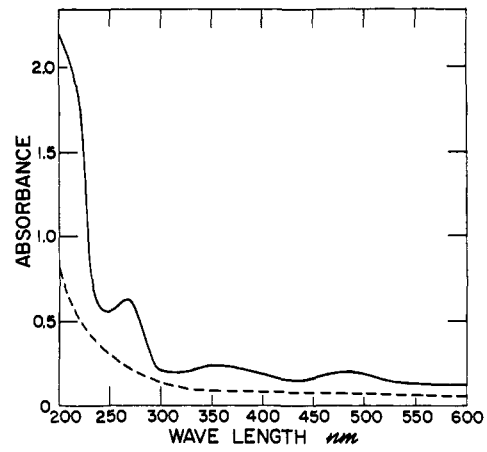

Figure 2. Absorption spectrum of native rubredoxin (—) and the iron complex (– – –) in water.

powder, which was partially insoluble in water and contained starting peptide and iron salts. The failure to obtain a stable, solid adduct implies the existence of an incorrect geometry for these two synthetic substrates. A biological assay is unavailable here, but the more complex rubredoxin from an aerobic bacterium, *Pseudomonas oleovarans*, functions in a ω-hydroxylation scheme.[20]

The conclusions reached are as follows: it is possible to form a complex between the ferric ion and the cysteines of the two peptides, whose visible colors are similar to that of rubredoxin, and, secondly, electron-transfer models are possible using existing, simple structural features found in native proteins.[21,22] We plan to extend this work to the synthesis of such peptides as Cys-x-x-Cys-Gly-Gly-Gly-Gly-Cys-x-x-Cys, since this unit represents an optimum distance between the cysteinyl residues, as measured on an actual molecular model.

Acknowledgments. We thank the Graduate School Research Fund of the University of Washington and the National Institutes of Health (Grant No. GM-12616) for financial support, and Dr. Walter Lovenberg, National Heart and Lung Institute, National Institutes of Health, for advice and comments.

Akhtar Ali, Falk Fahrenholz
John C. Gariing, Boris Weinstein*
Department of Chemistry, University of Washington
Seattle, Washington 98195
Received December 18, 1971

(20) E. T. Lode and M. J. Coon, *J. Biol. Chem.*, **246**, 791 (1971).
(21) B. Weinstein, *Biochem. Biophys. Res. Commun.*, **35**, 109 (1969).
(22) B. Winstein, *ibid.*, **41**, 441 (1970).

Additions and Corrections

Bonding and Valence Electron Distributions in Molecules. An X-Ray and Neutron Diffraction Study of the Crystal and Molecular Structure of Tetracyanoethylene Oxide [*J. Amer. Chem. Soc.*, **93**, 5945 (1971)]. By D. A. MATTHEWS,* J. SWANSON, M. H. MUELLER, and G. D. STUCKY, University of Illinois, School of Chemical Sciences, Urbana, Illinois 61801, and Argonne National Laboratory, Argonne, Illinois 60439.

On page 5946, column 2, the sentence beginning on the 13th line of the second paragraph under the heading **(a) X-Ray** should read: The polarization correction used for the monochromatic radiation was $(\cos^2 2\theta + \cos^2 2\theta_m)/(1 + \cos^2 2\theta_m)$, where θ_m is the Bragg angle for the monochromator crystal.

A Four-Parameter Equation for Predicting Enthalpies of Adduct Formation [*J. Amer. Chem. Soc.*, **93**, 6014 (1971)]. By RUSSELL S. DRAGO,* GLENN C. VOGEL, and TERENCE E. NEEDHAM, William A. Noyes Laboratory, University of Illinois, Urbana, Illinois 61801.

On page 6015, eq 2 should read: $\Delta = (A'PA)^{-1}A'PF$. On page 6026, the first display equation in the left-hand column should read: $-\Delta H = H_A H_B + k[(1/H_A)(1/H_B)]$.

^{31}P–^{11}B Constant as a Qualitative Measure of Dative Bond Strength [*J. Amer. Chem. Soc.*, **93**, 6821 (1971)]. By R. W. RUDOLPH* and C. W. SCHULTZ, Department of Chemistry, University of Michigan, Ann Arbor, Michigan 48104.

The first sentence on page 6822 should read: Therefore, sign inversion does not occur.

Singlet–Triplet Resonance Interaction in the A_2 States of Formaldehyde [*J. Amer. Chem. Soc.*, **93**, 7098 (1971)]. By C. G. STEVENS, A. M. GARCIA, and J. C. D. BRAND,* Photochemistry Unit, University of Western Ontario, London, Ontario, Canada.