does not agree with the higher value[3] reported in that solvent.

The most obvious explanation for the discrepancies in k_{sq} is to assume differences in purity of thioxanthenone (see Table I) used by the different groups of investigators. However, no information on the purity of the sample used was given in the previous reports so that it is difficult to judge whether this is the correct explanation. We have also considered the possibility of a diffusion-controlled singlet quenching mechanism. In terms of this mechanism, the thioxanthenone sensitized reactions of Chapman[2] and DeBoer[3] in which ϕ_0/ϕ^9 is plotted against (thioxanthenone) would yield a Stern–Volmer slope of $k_q{}^s\tau_s$, where $k_q{}^s$ is the diffusion-controlled singlet quenching rate constant and τ_s the excited singlet lifetime of thioxanthenone. The slopes obtained by these workers were

(9) ϕ represents the quantum yield of the sensitized reaction in the presence of sensitizer and ϕ_0 the limiting quantum yield as the concentration of the sensitizer approaches zero.

162 M^{-1} in $(CH_3)_3COH^2$ and $\sim 100\ M^{-1}$ in benzene.[3] Assuming a diffusion-controlled value of $k_q{}^s$ in benzene of $5 \times 10^9\ M^{-1}\ sec^{-1}$, a singlet excited lifetime of 20 nsec would be required. Preliminary experiments on the fluorescence lifetime of thioxanthenone indicate that the lifetime is less than 2 nsec, therefore denying the singlet quenching mechanism.

The mechanism of the triplet self-quenching process cannot be elucidated at the present time. However, our low value for k_q by dibenzothiophene would appear to rule out the involvement of the sulfur atom which could presumably act as an electron donor in the formation of a charge-transfer complex.

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Additions and Corrections

Preparation and Fragmentation of the 3-Thiabicyclo-[3.1.0]hexane 3,3-Dioxide Ring System. A Synthesis of 1,4-Dienes [*J. Amer. Chem. Soc.*, **92**, 6918 (1970)]. By WILLIAM L. MOCK, Department of Chemistry, University of Illinois, Chicago, Illinois 60680.

In the analysis of the nmr spectrum of the title substance (Table I and the ensuing discussion) the assignments of protons H^A and H^B were reversed. The corrected assignments place the δ 0.65 resonance in the *endo* position and the δ 1.23 resonance in the *exo* position. Similarly, $J_{A,C}$ and $J_{B,C}$ were also reversed. We thank Professor Robert S. Cooke of the University of Oregon for drawing our attention to this error.

Relaxation Amplitudes for Systems of Two Coupled Equilibria [*J. Amer. Chem. Soc.*, **94**, 356 (1972)]. By DARWIN THUSIUS, Laboratoire d'Enzymologie Physicochimique et Moléculaire, Groupe de Recherche du C.N.R.S. Associé à la Faculté des Sciences, 91 Orsay, France.

Under "limiting case" of Table I the second Γ factor should read: $A^0/(1 + B^0K)[1 + (B^0K)^{-1}]$.

Equations 30 and 31 should read

$$\Delta\phi_A = a_3\phi_{A_3} + c_A\phi_C - a_1\phi_{A_1} - a_2\phi_{A_2} \quad (30)$$

$$\Delta\phi_B = b_3\phi_{B_3} + c_B\phi_C - b_1\phi_{B_1} - b_2\phi_{B_2} \quad (31)$$

In the text above eq 37, $\alpha_1' = 2.3(\epsilon_D - \epsilon_{ED})l/(\delta \ln K_A)$ and $\alpha_2' = 2.3(\epsilon_D - \epsilon_{ED})l/(\delta \ln K_B)$, where l = optical path length.

In eq 59 the term $S/2$ should be placed between brackets.

The concentration variables in eq 61 are $\delta A_1/a_1$ and $\delta \bar{B}_1/b_1$.

In and above eq 66: ϕ_B and b_1 should read $\Delta\phi_B$ and b_{11}.

Electron Spectroscopy of Organic Ions. III. Alkyl- and Aryloxocarbenium Ions (Acyl Cations) [*J. Amer. Chem. Soc.*, **94**, 7191 (1972)]. By GHEORGHE D. MATEESCU, J. LOUISE RIEMENSCHNEIDER, JAMES J. SVOBODA, and GEORGE A. OLAH,* Case Western Reserve University, Cleveland, Ohio 44106.
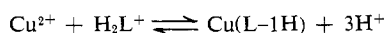
It has been mistakenly stated that the difference in C 1s electron binding energies of the two carbon atoms in acetonitrile is 3.0 eV. This value is <0.5 eV, as already shown by M. Barber and D. T. Clark [*Chem. Commun.*, 22 (1970)]. The 3.0 eV binding energy difference was meant to compare the difference of C 1s E_b's of CO^+ in CH_3CO^+ with CH_3CN.

Thermodynamics and Kinetics of Complex Formation between Cobalt(II), Nickel(II), and Copper(II) with Glycyl-L-leucine and L-Leucylglycine [*J. Amer. Chem. Soc.*, **94**, 8031 (1972)]. By ROBERT F. PASTERNACK,* LINDA GIPP, and HELMUT SIGEL, Department of Chemistry, Ithaca College, Ithaca, New York 14850, and Institute of Inorganic Chemistry, University of Basel, CH-4000 Basel, Switzerland.

Equilibria 6 and 7 on page 8032 should read

$$Cu^{2+} + H_2L^+ \rightleftharpoons CuL^+ + 2H^+$$
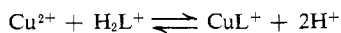
$$K^{2H}{}_{(Cu+H_2L)} = [CuL][H]^2/[Cu][H_2L] \quad (6)$$

$$Cu^{2+} + H_2L^+ \rightleftharpoons Cu(L-1H) + 3H^+$$

$$K^{3H}{}_{(Cu+H_2L)} = [Cu(L-1H)][H]^3/[Cu][H_2L] \quad (7)$$

On page 8032, column 2 (including eq 8 and 9), and on page 8033, column 1, the expressions $K^H{}_{(Cu+HL)}$ and $K^{2H}{}_{(Cu+HL)}$ should be replaced by $K^{2H}{}_{(Cu+H_2L)}$ and $K^{3H}{}_{(Cu+H_2L)}$, respectively. All the numbers are correctly given.