In summary, we have demonstrated that carbon monoxide can be efficiently trapped by carbon radicals at reasonably low CO pressures, contrary to previous observations. The success of this *free-radical carbonylation* obviously provides a new method for the introduction of carbon monoxide into organic molecules.[9,10] Further studies on the scope and synthetic application are currently under investigtion.

Registry No. 1, 111-83-1; **2**, 124-19-6; **3**, 111-65-9; $Ph(CH_2)_3Br$, 637-59-2; $Ph(CH_2)_2Br$, 103-63-9; $PhCH_2Br$, 100-39-0; PhI, 591-50-4; *p*-$MeOC_6H_4I$, 696-62-8; c-$C_6H_{11}Br$, 108-85-0; (*E*)-EtCH=CH-$(CH_2)_2Br$, 63281-96-9; (*Z*)-EtCH=CH$(CH_2)_2Br$, 5009-31-4; Ph-$(CH_2)_3CHO$, 18328-11-5; $Ph(CH_2)_2CHO$, 104-53-0; $PhCH_3$, 108-88-3; PhCHO, 100-52-7; *p*-$MeOC_6H_4CHO$, 123-11-5; c-$C_6H_{11}CHO$, 2043-61-0; (*E*)-EtCH=CH$(CH_2)_2CHO$, 929-22-6; (*Z*)-EtCH=CH-$(CH_2)_2CHO$, 6728-31-0; CO, 630-08-0; 1-adamantyl bromide, 768-90-1; 1-adamantanecarboxaldehyde, 2094-74-8.

Supplementary Material Available: ^1H and ^{13}C NMR, IR, and some mass spectral data for products listed in Table I (3 pages). Ordering information is given on any current masthead page.

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[9] For the preexisting methodologies for carbonylation with CO involving other acyl species (acylmetals, acyl anions, and acyl cations), see recent reviews: (a) Narayama, C.; Periasamy, M. *Synthesis* **1985**, 253. (b) Weil, T. A.; Casser, L.; Foa, M. In *Organic Synthesis via Metal Carbonyls*; Wender, I., Pino, P., Eds.; Wiley: New York, 1977; Vol. 2, p 517. (c) Bahrman, H.; Cornils, B.; Frohling, C. D.; Mullen, A. In *New Syntheses with Carbon Monoxide*; Falbe, J., Ed.; Springer: Berlin, 1980.

[10] The overall transformation as a method for aldehyde synthesis is noteworthy, since the carbonylation of aliphatic substrates is particularly difficult by transition-metal methods. In this context, the radical method reported here complements the method involving Pd catalysis by J. K. Stille; see: Baillargeon, V. P.; Stille, J. K. *J. Am. Chem. Soc.* **1983**, *105*, 7175.

Additions and Corrections

Thermal Encapsulation and Photochemical Deencapsulation of Ag(I) by $[Ir_2(dimen)_4](PF_6)_2$ (dimen = 1,8-Diisocyanomethane). X-ray Crystal Structure of $[AgIr_2(dimen)_4](PF_6)_3 \cdot 2DMSO$ [*J. Am. Chem. Soc.* **1988**, *110*, 8252]. ANDREW SYKES and KENT R. MANN*

Page 8253: In Figure 2, the formation constant for the thermal encapsulation of Ag^+ in DMSO is misstated as 1.5×10^8 M^{-1}. The correct value is 1.5×10^7 M^{-1}. The calculations in the text (page 8253) should be adjusted to give log *K* of 7.2 and the corresponding free energy change of −9.8 kcal/mol.

Time-Resolved Raman Detection of ν(Fe–O) in an Early Intermediate in the Reduction of O_2 by Cytochrome Oxidase [*J. Am. Chem. Soc.* **1989**, *111*, 6439–6440]. CONSTANTINOS VAROTSIS, WILLIAM H. WOODRUFF, and GERALD T. BABCOCK*

The spectrometer used in this characterization of the dioxygen adduct of cytochrome a_3^{2+} in the reaction of fully reduced cytochrome oxidase with O_2 was miscalibrated in the 540–660 cm^{-1} region. With proper calibration, the 589- and 565-cm^{-1} lines occur at 571 and 546 cm^{-1}, respectively. Therefore, we assign the $\nu(Fe^{2+}–O)$ frequency at 571 cm^{-1}. This value is very similar to that which we measured for the iron–oxygen stretching frequency in an imidazole–heme $a^{2+}–O_2$ model compound (see ref 7 in the original publication) and identical with that which we measured in the reaction of mixed valence cytochrome oxidase with O_2. (Varotsis, C.; Woodruff, W. H.; Babcock, G. T. *J. Biological Chem.* Submitted).

This indicates, contrary to our earlier conclusion, that the cytochrome $a_3 \cdot O_2$ complex is unperturbed by distal effects in the cytochrome a_3/Cu_B binding pocket. Weakening and rupture of the O=O bond occurs subsequent to formation of the initial dioxygen–a_3^{2+} adduct.

Selenium Coronands: Synthesis and Conformational Analysis [*J. Am. Chem. Soc.* **1989**, *111*, 6582]. RAYMOND J. BATCHELOR, FREDERICK W. B. EINSTEIN, IAN D. GAY, JIAN-HUA GU, BLAIR D. JOHNSTON, and B. MARIO PINTO*

Recent investigations in our laboratory show that the solid-state ^{77}Se chemical shifts reported in ref 1 are incorrect. This arises from an error in the referencing procedure. Our measurements were referred to a solution of aqueous H_2SeO_3 and converted to the $(CH_3)_2Se$ scale with use of the literature value[2,3] of 1282 ppm for the shift of H_2SeO_3. Direct measurement shows this figure to be incorrect, and the shifts reported in Table XI of ref 1 should be corrected by +22 ppm to give shifts relative to $(CH_3)_2Se$ in $CDCl_3$.

Page 6584: In footnotes *i* and *j* to Table II *W* should be *w*.

Page 6588 first column, line 25: "clockwise" should be "counterclockwise".

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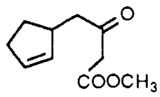
(1) Batchelor, R. J.; Einstein, F. W. B.; Gay, I. D.; Gu, J.-H.; Johnston, B. D.; Pinto, B. M. *J. Am. Chem. Soc.* **1989**, *111*, 6582.

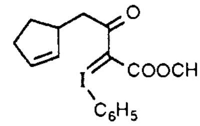
(2) *NMR and the Periodic Table*; Harris, R. K., Mann, B. E., Eds.; Academic Press: New York, 1978.

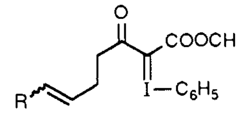
(3) Lardon, M. *J. Am. Chem. Soc.* **1970**, *92*, 5063.

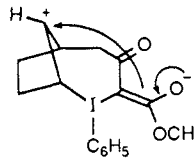
A Novel Intramolecular Cyclopropanation Using Iodonium Ylides [*J. Am. Chem. Soc.* **1989**, *111*, 6443]. ROBERT M. MORIARTY,* OM PRAKASH, RADHE K. VAID, and LEI ZHAO

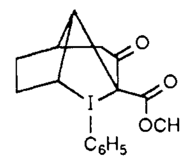
Pages 6443 and 6444: The correct structures for **1**, **2**, **4**, **12**, and **13** follow:


1


2


4a, R = H
4b, R = CH_3


12


13

Page 6443: The following should be added to ref 10. **4a**: ^1H NMR ($CDCl_3$) δ 2.50 (t, 2 H, CH_2), 3.20 (m, 2 H, CH_2), 3.75 (s, 3 H, $COOCH_3$), 5.10 (m, 2 H, $CH{=}CH_2$), 6.09 (m, 1 H, $CH{=}CH_2$), 7.40–7.90 (m, 5 H, aromatic protons). **6**: ^1H NMR ($CDCl_3$) δ 1.30–2.10 (m, 4 H, 2 × CH_2), 2.85 (m, 1 H, CH), 3.20 (m, 1 H, CH), 3.70 (s, 3 H, $COOCH_3$), 4.15 (m, 1 H, CH), 5.80 (m, 2 H, $CH{=}CH$), 6.20 (m, 1 H, $CH{=}CH$), 7.30–7.90 (m, 5 H, aromatic protons).