## Additions and Corrections

Determination of the Absolute Configuration of a Secondary Hydroxy Group in a Chiral Secondary Alcohol Using Glycosidation Shifts in Carbon-13 Nuclear Magnetic Resonance Spectroscopy [J. Am. Chem. Soc. 1978, 100, 3331]. S. Seo, Y. Tomita, K. Tori,* and Y. Yoshimura, Shionogi Research Laboratory, Shionogi \& CO., LTD., Fukushima-ku, Osaka, 553, Japan.

In the correction on page 2512 for this article the R's for 21 and 22 were given incorrectly. The labeling should be as follows:

$$
\begin{aligned}
& R=0, \text { preisocalamenediol } \\
& R=\int_{O H}^{H}
\end{aligned}
$$

Conformational Mobility and Optical Rotation Effects of Aromatic Nuclei [J. Am. Chem. Soc. 1966, 88, 2233]. James H. Brewster* and J. George Buta, Department of Chemistry, Purdue University, West Lafayette, Indiana 47907.

Professors H. E. Smith (Vanderbilt Unversity) [see, J. Am. Chem. Soc. 1971, 93, 2282; 1978, 100, 6035] and H.-J. Hansen (Fribourg University) [see, Helv. Chim. Acta 1979, 62, 1120] have provided evidence that the Bendix-Ericsson recording spectropolarimeter used in our work is not reliable with samples of low rotation. Our long wavelength data for the hydrochloride of ( $R$ )-1-indanamine (Id) and most of the complete ORD curve for $(R)-1$-methylindane (Ih) are wrong in sign. This appears to be the result of a malfunction of the base-line indicator. The ORD Cotton effects reported here appear to be essentially correct; those of 1-indancarboxylic acid (Ia), its salt (Ib), 1-indanylcarbinol (Ig), 1 -indanamine hydrochloride (Id), $\mathrm{N}, \mathrm{N}$-dimethyl-1-indanamine methiodide (Ie), and 1-indanol (If) have been confirmed as to wavelength and rough magnitude on a Cary ORD-CD instrument by R. J. Lorentzen of this department [Ph.D. Thesis, Purdue Unversity, 1971].

Inasmuch as our claim that ( $R$ )-1-methylindan (from ( $R$ )$(+)$ - 1 -indanylcarbinol) is levorotatory in isooctane rests on an erroneous ORD curve, it is clear that that claim must be voided. Some of the consequences of this have been presented in more detail in a note submitted to another journal.

Mechanistic Stiudies on the Catalysis of Isomerization of Olefins by $\left(\mathbf{P P h}_{3}\right)_{3} \mathbf{N i X}[J . A m$. Chem. Soc. 1978, 100, 1474]. M. J. D'aniello, Jr., and E. Kent Barefield,* The School of Chemical Sciences, University of Illinois, Urbana, Illinois, 61801, and the School of Chemistry, Georgia Institute of Technology, Atlanta, Georgia 30332.

Page 1479 , left column, third paragraph, line 12: " $g=2.975$ " should read " $g=2.175$ ".
$\mathbf{N}^{1^{\prime}}$-Methylthiaminium Diiodide. Model Study on the Effect of Coenzyme Bound Positive Charge on Reaction Mechnism Requiring Thiamin Pyrophosphate [J. Am. Chem. Soc. 100, 2534]. Frank Jordan* and Yitbarek H. Mariam, The Carl A. Olson Labortories of Chemistry, Rutgers, the State University, Newark, New Jersey 07102

1. In Table III under decarboxylation the numbers should be changed to read as (a change only in all four exponents from $10^{-6}$

|  | $k_{\text {obsd }}$ with la | $k_{\text {obsd }}$ with Ib |
| :---: | :---: | :---: |
| row 2: | $1.69 \times 10^{-3} \mathrm{~mol} / \mathrm{min} \cdot \mathrm{mol}$ | Ia $5.8 \times 10^{-3} \mathrm{~mol} / \mathrm{min} \cdot \mathrm{mol} \mathrm{Ib}$ |
| row 3: | $2.08 \times 10^{-3} \mathrm{~mol} / \mathrm{min} \cdot \mathrm{mol}$ | la $6.24 \times 10^{-3} \mathrm{~mol} / \mathrm{min} \cdot \mathrm{mol} \mathrm{It}$ |

Acetoin Formation) should be disregarded. Very likely what was being monitored by pH -stat was a combination of reactions related to the chemistry of thiamin as catalyzed by pyruvate, as well as pyruvate decarboxylation catalyzed by thiamin. This negative experience with the pH -stat method warns us not to employ this method in model pyruvate decarboxylation rate studies.
2. The raw data presented for thiazolium ring opening in Figure 5 is correct but a factor of 2.3 (from log to In) was inadvertantly left out in the calculation of $k_{\text {obsd }}$ in Table III. That row in Table III should now read as follows: Thiazolium ring opening; temp, ${ }^{\circ} \mathrm{C}, 30 \pm 1 ; \mathrm{pH}, 9.6 \pm 0.1 ; k_{\text {obsd }}$ with Ia, $1.3 \times 10^{-3} \mathrm{~s}^{-1} ; k_{\text {obsd }}$ with $\mathrm{Ib}, 5.1 \times 10^{-3} \mathrm{~s}^{-1}$; concn., $10^{-4} \mathrm{M}$; rel rates, rate $\mathrm{Ib} /$ rate Ia, 3.9 . Since the manuscript emphasized the relative rates obtained with Ia and Ib, the conclusions are not affected in any way.

The authors thank Dr. R. Kluger, University of Toronto, for bringing to their attention the problem discussed in paragraph 1.

Conformational Analysis of Tertiary Cycloalkyl ( $\mathrm{C}_{6}, \mathrm{C}_{7}, \mathrm{C}_{8}$ ) Carbocations. Unexpected Preference for the Twist-Boat Conformation in the Cyclohexyl Case [J. Am. Chem. Soc., 1978, 100, 1487]. Roger P. Kirchen and Ted S. Sorensen,* Department of Chemistry, University of Calgary, Alberta, Canada T2N 1N4.

On page 1494 in footnote $25, \ldots$ [4.4.0] skeleton... should read $\ldots$...4.3.0] skeleton... Structures i and ii should be replaced accordingly by:


Homogeneous Catalysis of the Water Gas Shift Reaction by Mixed Metal (Iron/Ruthenium) Catalysts [J. Am. Chem. Soc. 1978, 100, 4595-4597]. P. C. Ford,* R. G. Rinker, C. Ungermann, R. J. Laine, V. Landis, and S. A. Moya, Department of Chemistry, University of California, Santa Barbara, California 93106
The sentence beginning on line 5 , column $1, p 4597$, and running to line 8 currently reads: "Spectral characterization as well as isolation of various reaction components indicate the presence of several mixed-metal clusters including $\mathrm{H}_{2} \mathrm{FeRu}_{3}(\mathrm{CO})_{13}$ in these solutions." This sentence should read: "Spectral characterization as well as isolation of various components froni neutralized catalyst solutions indicate the presence of several mixed metal clusters including $\mathrm{H}_{2} \mathrm{FeRu}_{3}(\mathrm{CO})_{13}$ in these solutions."

Asymmetric Synthesis in a Confined Vortex: Gravitational Fields Can Cause Asymmetric Synthesis [J. Am. Chem. Soc. 1980, 102, 381]. Deborah Edwards, Keith Cooper, and Ralph C. Dougherty,* Department of Chemistry, Florida State University, Tallahassee, Florida 32306.

Page 382, column 2; the first sentence in the first paragraph (line 2) should read, "This motion is contragradient to the motion..."; the following sentence (line 6) should read, "...would be coincident with the combination. ..". The last two sentences in this paragraph (lines 7-11) should be deleted.

The most probable reason for the difference between the optical rotations in the clockwise and counterclockwise spinning attitude is the difference in vibration of the spinner in the two orientations. The spinner operated more smoothly and at a higher average rotational rate when operated in the counterclockwise attitude which produced the smaller optical rotations in the product.
We are indebted to C. A. Mead and A. Moscowitz for pointing out the error.

