

## ACKNOWLEDGMENT

The authors are indebted to Research and Development Division (Baytown, Texas) of the Humble Oil and Refining Co. for the mass spectral data and to N.G. Foster and R.F. Kendall of this Research Center for the infrared spectra.

## LITERATURE CITED

- (1) Coleman, H.J., Adams, N.G., Eccleston, B.H., Hopkins, R.L., Mikkelsen, Louis, Rall, H.T., Richardson, Dorothy, Thompson, C.J., Smith, H.M., *Anal. Chem.* **28**, 1380 (1956).
- (2) Cox, Edwin, R., *Ind. Eng. Chem.* **15**, 592 (1923).
- (3) Donnell, C.K., Kennedy, R.M., *Proc. Am. Petrol. Inst. Sect. III* **26**, 23 (1946).

- (4) Thompson, C.J., Coleman, H.J., Hopkins, R.L., Rall, H.T., *U. S. Bur. Mines Rept. of Invest.* **6252**, 11 pp. (1963).
- (5) Thompson, C.J., Coleman, H.J., Rall, H.T., Smith, H.M., *Anal. Chem.* **27**, 175 (1955).
- (6) Thompson, C.J., Coleman, H.J., Ward, C.C., Rall, H.T., *Ibid.* **32**, 424 (1960).

RECEIVED for review October 11, 1963. Accepted March 13, 1963. Reference to specific brands is made to facilitate understanding and does not imply endorsement of such items by the Bureau of Mines. Presented at Southwest Regional Meeting, ACS, Dallas, Texas, 1962. Investigation performed as part of the work of "Measurement of Their Properties," which the Bureau of Mines conducts at Bartlesville, Okla. and Laramie, Wyo.

## CORRECTIONS

In the article "Measurement of Dynamic Surface Tension in Bubbling Systems" by John B. Roll and John E. Myers [J. CHEM. ENG. DATA **9**, 257 (1964)] the captions for figures 3 and 4 should be reversed.

In the article "Interaction in Nonelectrolyte Solutions, Solubility of Naphthalene in Some Mixed Solvents Containing Benzene" by E.L. Heric and C.D. Posey [J. CHEM. ENG. DATA **9**, 35 (1964)] a number of corrections should be made.

Equation 12 is:  $RT \ln \gamma_2 = x_1^2 W_{12} + x_3^2 W_{23} + x_1 x_3 (W_{12} + W_{23} - W_{13})$

Equation 13 is:  $RT \ln \gamma_2 = V_2^2 [\phi_1^2 W_{12}' + \phi_3^2 W_{23}' + \phi_1 \phi_3 (W_{12}' + W_{23}' - W_{13}')] ]$

Equation 16 is:  $|W_{02}|^{1/2} = \frac{\phi_1 |W_{12}|^{1/2} \pm \phi_3 |W_{23}|^{1/2}}{\phi_1 + \phi_3}$

The main column heading appearing on page 41 should read  $W'$ , Cal.  $\text{Ml.}^{-1}$  and the heading for column 11 should read  $(\delta_{\text{Benzene}} - \delta_{\text{second solvent}})^{2,b}$ .

In the article "Identification of Nitrogen Bases in Heavy Gas Oil; Chromatographic Methods of Separation" by D.M. Jewell and G.K. Hartung [J. CHEM. ENG. DATA **9**, 297 (1964)] the present address of G.K. Hartung is Munich 25, Germany, Marbachstrasse 12.

On p. 302 the lines 25-31 "absorbs at 251  $\text{m}\mu$  which would cause the disagreement in the  $\lambda$  minima values between the two curves illustrated.

"In order to ascertain the presence of the 1,10-phenanthroline isomer in fraction 2SF, the well known reaction of ferrous ions with these types of nitrogen bases was employed: the ferrous ions form stable, water soluble, red complexes with compounds having an  $\alpha, \alpha'$ -phenanthroline. . ." should immediately precede ". . . type of linkage (8, 13, 14)" at the top of p. 302.

Two corrections should be made in the article "Thermodynamic Properties of HF" by R.M. Yabroff, J.C. Smith, and E.H. Lightcap [J. CHEM. ENG. DATA **9**, 178 (1964)]. The first conversion factor listed in the nomenclature should read  $C = \text{specific heat, P.c.u./lb.-}^\circ\text{C. or cal./g.-}^\circ\text{C.}$  On page 180, below Equation 8, the definition for  $C^*$  is

$$C_c + V \frac{\Delta P}{\Delta T}$$