ERRATUM

In "A New Reduced Vapor Pressure Equation" by Richard E. Thek and Leonard I. Stiel [Vol. 12, No. 3, pp. 599-602 (1966)], Equation (13) should read as

$$\ln P_R = A\left(1.14893 - \frac{1}{T_R} - 0.11719\, T_R - 0.03174\, T_R^2 - 0.375 \ln T_R\right) + c\left[\frac{T_R^{n-1} - 1}{n-1} + k\left(\frac{1}{T_R} - 1\right)\right] \quad (13)$$

Equation (17), which is based on Equation (13), should read as

$$\ln P_R = A\left(1.14893 - \frac{1}{T_R} - 0.11719\, T_R - 0.03174\, T_R^2 - 0.375 \ln T_R\right) + (1.042\alpha_c - 0.46284A)\left[\frac{T_R^{5.2691 + 2.0753A - 3.1738a} - 1}{5.2691 + 2.0753A - 3.1738a} + 0.040\left(\frac{1}{T_R} - 1\right)\right] \quad (17)$$

Letter to the Editor

The Energy Balance for Ideal Gas Flow

In a recent communication by de Nevers [Vol. 13, No. 2, pp. 387-388 (1967)], the energy balance for an ideal gas bubbling through a liquid is obtained as

$$\frac{dQ}{dt} = \frac{1}{J g_c}\left(\frac{\Delta V^2}{2} + g\,\Delta Z\right) M_G$$

de Nevers, who states that the form of this equation is peculiar (because heat is *added* to the gas in order to keep it isothermal, although the process considered is dissipative), discusses in some detail the mechanism of dissipation through the liquid phase. It is our opinion that the reader is left with the impression that the energy balance takes this particular form due to the presence of the liquid phase.

In reality, the above equation is valid for an ideal gas flowing through any system whatsoever, provided that (1) the inlet and exit temperatures are equal, and (2) there is no shaft work done on the system. Consider an ideal gas flowing upward through a tube: the enthalpy being independent

(Continued on page 831)

(Continued from page 625)

COMMUNICATIONS TO THE EDITOR