Errata

Table 3, right, is a corrected version of the one published in "Correlating Vapor Pressures and Heats of Solution for the Ammonium Nitrate-Water System" by Donald F. Othmer and Gerhard J. Frohlich, *A.I.Ch.E. Journal*, **6**, 210 (1960). The authors are obliged to Stanley J. Porter of the Fisons Fertilizers Ltd., Bramford, England, for pointing out the discrepancies.

In "A Corresponding States Correlation for Higher Molecular Weight Liquids" by A. Bondi and D. J. Simkin, *A.I.Ch.E. Journal*, **6**, 191 (1960), the van der Waals volumn V_w of cycloparaffins was calculated without allowance for the compression of the molecule by mutual approach of nonbonded methylene groups to closer distances than corresponds to the van der Waals radius of the carbon atom. Allowance for this effect means that one has to subtract 1.14 cc./mole from V_w for each six (or five) ring in the molecule. The corresponding correction for the surface area of a mole of molecules A_w is -0.57×10^9 sq.cm./ring. The resulting changes in $E°$ are listed in the table at the right.

Most of the anomalies in the p-v-T and surface energy relations of polycyclic naphthese mentioned in the original article disappear once these corrections have been made.

TABLE 3. ENTHALPIES FOR SOLID AMMONIUM NITRATE DERIVED FROM DATA OF REFERENCE 8, *14*. (BASE TEMPERATURE 0°C.)

Phase	Temperature t, °C.	Enthalpy Kcal./kg.-mole NH_4NO_3
V	—60 to —17	$H°_A = -5,043 + 3.10T + 0.0551T^2$
V-IV	—17	$\Delta H_{TR} = 110.8$
IV	—17 to +32	$H°_A = -5,580 + 9.54T + 0.0398T^2$
IV-III	+32	$\Delta H_{TR} = 409.9$
III	+32 to +83	$H°_A = -5,043 + 14.11T + 0.0235T^2$
III-II	+83	$\Delta H_{TR} = 311$
II	+83 to +125	$H°_A = -6,420 + 27.22T$
II-I	+125	$\Delta H_{TR} = 1,027$
I	+125 to +170	$H°_A = -5,393 + 27.22T$
I-liquid	+170	$\Delta H_{fusion} = 1,460''$

REVISED CORRELATIONS FOR CALCULATING $E°$ OF CYCLOPARAFFINS

One Ring System per Molecule

Monoalkylcyclohexanes: $E° = 6.85 - 0.20 \sum_{2}^{N_B} \frac{1}{N_B - 1} + \frac{1}{2} E° (P_2)$

Dialkylcyclohexanes: $E° = 5.40 + \sum_{b} \frac{1}{2} E° (P_2)$

Monoalkyl decalins: $E° = 9.60 + \frac{1}{2} E° (P_a)$

Polycyclic Naphthenes

Cyclopentanes: $E° = 5.45 R_1 + 4.30 R_2 + 1.1 M - 2.25X + \frac{1}{2} E° (P_2)$

Cyclohexanes: $E° = 6.45 R_1 + 5.00 R_2 + 1.05 M - 2.25X + \frac{1}{2} E° (P_2)$

Condensed cyclic polymethylenes (except those containing endo methylene groups): $E° = 1.34 M_c + 0.20 T$