

arating system for a new and unknown process to make a new and hopefully profitable product?

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π -Particulate Information, Particle Science and Technology Information Service, University of Technology, Loughborough, Leicestershire, England. \$43/yr.

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Sample copies of π can be obtained from Paul R. Foxcroft, Information Officer, Particle Science and Technology Information Service, University of Technology, Loughborough, Leicestershire, LE11 3TU, England.

Engine Emissions, George S. Springer and Donald J. Patterson (eds.), Plenum Press, New York-London (1973). 371 pages. \$28.50.

To the serious researcher in the field of emissions from transportation engines, *Engine Emissions* provides an excellent review of the state of the art (science) of the sources and mechanism of emission formation during the combustion processes in spark ignition, diesel, and aircraft engines. The relevant literature is extensively covered to illustrate the various experimental techniques and often conflicting results common to this area; in addition, the present and next generation of instrumentation and techniques for measur-

tate and Propylene" by R. D. Newman and J. M. Prausnitz [19, 704 (1973)], the retention volumes for solvent-polyisobutylene systems were incorrectly calculated as a result of a card-punching error in data reduction. The reported results are based on an erroneous polymer weight of 2.3218 g whereas the correct weight was 2.0995 g. Therefore the activity coefficients in Table 6 are too large by about 10% and the χ values are too large by about 0.1. A revised Table 6 is given here.

The results shown in Figure 5 are too high by about 10% and in Figure 6, the χ values for cyclohexane, *n*-hexane, toluene and benzene in polyisobutylene are about 0.1 unit too large.

TABLE 6 (REVISED). ACTIVITY COEFFICIENTS AT INFINITE DILUTION (WT. FRACTION) AND IN PARENTHESES, FLORY χ PARAMETERS FOR SOLVENTS IN POLYISOBUTYLENE $\Omega_1 \propto (\chi)$

Solvent	50°C	75°C	100°C	125°C	150°C
Benzene	5.93(0.72)	5.84(0.68)	5.75(0.64)	5.66(0.60)	5.56(0.56)
Toluene	5.30(0.60)	5.21(0.56)	5.12(0.55)	5.01(0.49)	4.91(0.45)
<i>n</i> -hexane	6.29(0.48)	6.44(0.47)	6.58(0.46)	6.72(0.45)	6.86(0.44)
Cyclohexane	4.56(0.33)	4.64(0.32)	4.72(0.32)	4.80(0.31)	4.88(0.30)

ing emissions are examined.

Engine Emissions gives the reader a view of the sophistication necessary to gain an insight into the fundamentals of this source of our air pollution problems. It is not easy reading and the average chemical engineer will need a great deal of persistence to digest the various chapters unless this happens to be his particular field of specialization. However, even for the relatively disinterested chemical engineer, selective reading in *Engine Emissions* will be informative and useful, if only for the reason that it very aptly indicates the complexity of characterizing and identifying emission sources—necessary information before we can proceed to their elimination.

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In "Vapor-Liquid Equilibrium Calculations for Concentrated Polymer Solutions" by D. C. Bonner and J. M. Prausnitz [19, 943 (1973)], several corrections should be made:

- Equation (5) should read

$$\frac{\tilde{p}_v}{\tilde{T}} = \frac{\tilde{v}^{1/3}}{\tilde{v}^{1/3} - 1} - \frac{1}{\tilde{v}\tilde{T}}$$

- Equation (6) should read

$$\tilde{T} = \frac{\tilde{v}^{1/3} - 1}{\tilde{v}^{4/3}}$$

- Equation (25) should read

$$\alpha \equiv 1/v \left(\frac{\partial v}{\partial T} \right)_p = \frac{3\tilde{v}^{1/3} - 3}{4T - 3\tilde{v}^{1/3}T}$$

- The middle curve in Figure 8 should be labeled $\Delta = 0.02$.

In "Catalytic Oxidation of Hydrogen Chloride in a Fluid Bed Reactor" by Shintaro Furusaki [19, 1009 (1973)], the ordinate in Figure 2 should read Rate $\times 10^3$ (mg mol/g-cat s).

In the Letter to the Editor from R. D. Gunn and C. J. King [19, 1285 (1973)], one reference is missing. It is: Gunn, R. D., and C. J. King, "Mass Transport Characteristics of Freeze-Dried Foods," *Chem. Eng. Progr. Symp. Ser. No. 108*, 67, 94 (1971).

ERRATA

In "Thermodynamics of Concentrated Polymer Solutions Containing Polyethylene, Polyisobutylene, and Copolymers of Ethylene with Vinyl Ace-