

Leyer, and R. I. Soloukhin, American Institute of Aeronautics and Astronautics, 1986.

The subject of combustion is intimately related to many of the concerns currently being explored by reaction engineers, and some of the topics covered by these symposium volumes are reflected in papers published by chemical engineers in the chemical engineering literature. Yet, with the exception of the first-named editor, chemical engineers—particularly chemical reaction engineers—are notably absent from the list of authors. Why this is so is a mystery to me, because there is a lot of “mainstream” chemical engineering described in these papers.

An Atlas of Functions

J. Spanier, and K. B. Oldham, Hemisphere Publishing, New York, 1987, 712 pp., \$149.50

The premise of this volume is that users of special functions would prefer to have general properties, graphs giving values to two significant figures, and detailed algorithms, rather than extensive numerical tables. It could be a nice complement to Abramowitz and Stegun's, *Handbook of Mathematical Functions*, though at this price it will replace it for only a very few. It is a useful book, and well worth knowing about; libraries should have it.

CODATA Thermodynamic Tables Selections for Some Compounds of Calcium and Related Mixtures: A Prototype Set of Tables

Ed., D. Garvin, V. B. Parker, and H. J. White, Jr. Springer Verlag, 1987, 356 pp., \$69.95

National Standard Reference Data Service of the USSR A Series of Property Tables, English Language

Ed., Theodore B. Selover, Jr. Springer Verlag, 1987, Vols. 1-7: thermodynamic properties of Helium, 316 pp.; Nitrogen, 342 pp.; Methane, 342 pp.; Ethane, 303 pp.; Oxygen, 308 pp.; Air, 276 pp.; Ethylene, 278 pp. Vols. 8 and 9: thermophysical properties of Freons (Methane series, parts 1 and 2, 200 and 243 pp., respectively, Vol. 10: thermophysical properties of Neon, Argon, Krypton, and Xenon, 604 pp. Vols. 1-9, \$120/volume, Vol. 10, \$150.

These publications tabulate a variety of thermodynamic properties. Volumes 8, 9, and 10 of the Russian compilation also present some transport properties. In addition to extensive experimental results, the authors give a critical evaluation of the data, including possible sources of experimental errors. These summaries of experimental results provide useful data for chemical process design and for theorists concerned with establishing funda-

mental correlations of thermodynamic and transport properties.

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The titles of the following compilations of physical property data are generally self-explanatory, except for the last, which mostly contains solidification, boiling points, and Antoine equation constants.

Handbook of Heats of Mixing, Supplementary Volume

J. J. Christensen, R. L. Rowley, and R. M. Izatt, eds., Wiley-Interscience, New York, 1988, 1145 pp.

Properties of Inorganic and Organic Fluids. CINDAS Data Series on Material Properties

Vol. V-1, P. E. Liley, T. Makita, and Y. Tanaka, Hemisphere Publishing, New York, 1988, 307 pp., \$80.00

Flash Points of Organic and Organometallic Compounds

R. M. Stephenson, Elsevier, New York, 1987, 295 pp., \$69.00

Handbook of the Thermodynamics of Organic Compounds

Richard M. Stephenson, and Stanislaw Malanowski, Elsevier, New York, 1987, 552 pp., \$69.00

Errata

Equations 22 and 23 of the paper entitled “The Birefringence Problem in Optical Disk Substrates: A Modeling Approach” (March 1989, p. 452) should read:

$$\tau_{11} - \tau_{33} = N_1 + N_2 \quad (22)$$

$$R_N \equiv 2H \langle \Delta n_{13} \rangle = 2C_M \int_0^H (\tau_{11} - \tau_{33})_R dz \quad (23)$$

These changes should lower the predictions of Δn_{13} (R_N) somewhat, but the essential results and conclusions should remain unchanged.