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for the design room. New material has been added throughout, particularly in the areas of astronautics, air pollution, computers, direct-energy devices, and cryogenics. Comparison with Perry's "Chemical Engineers' Handbook" reveals nicely the scope of the work of the mechanical engineer vs. that of the chemical engineer. [College freshmen (and student advisers) might note that the various handbooks can serve as excellent vocational guides to the various engineering divisions.] Material common to both Baumeister's and Perry's handbooks include mathematics, weights and measures, heat and mass transfer, thermodynamics, instrumentation, and electrical and industrial engineering subjects. Beyond this common core, the mechanical engineering handbook surveys mechanics, kinematics, and the dynamics of solids; elasticity, stress analysis; vibration and measurement; mechanisms, machine elements (gears, etc); friction, bearings, and lubrication; combustion engines, rockets; steam, gas, and hydraulic turbines; nuclear power, solar energy; transportation vehicles; aeronautics and astronautics; structural design, heating systems, illumination, sound, noise; cutting and working of metals and plastics, welding; and air pollution (but only three or four sentences on the role of the automobile in pollution). The differences in content arise from the emphasis of the chemical engineer on unit processes and the emphasis of the mechanical engineer on power and production. The emphasis carries over even to the common core of topics; for example, the sections on thermodynamics in the two handbooks complement each other rather than overlap (although, regrettably, with differences in symbols and terminology). Thus both handbooks have a place in the same design room.

If a handbook is viewed as a handy reference for the undergraduate student or for the engineer without a large library, the "Standard Handbook" fulfills the purpose. As a precise source of data, however, many of the references are old or secondary or textbooks. Slight differences in physical constants are ignored. (For example, it is implied that the IT calorie is the standard.) In these respects (and in its larger page size) Perry's "Handbook" is superior.

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ERRATUM

In "Convective Diffusion in Stagnation Flow with an Imperfect Semi-

permeable Interface" by Dale W. Zeh and William N. Gill [Vol. 13, No. 5, pp. 1014-1016 (1967)], Equation (5) should read

$$\begin{aligned} -v_w &= \frac{A}{1-w_{sp}} \left[\Delta P - \pi_o \frac{(w_{sw} - w_{sp})}{w_{se}} \right] \\ &= \frac{A\Delta P}{1-w_{sp}} \left[1 - B \frac{(w_{sw} - w_{se})}{w_{se}} \right] \end{aligned} \quad (5)$$

and Equation (20) should read

$$\begin{aligned} -v_w &= \sqrt{\frac{U_e v}{x}} \\ F(0) &= \frac{A\pi_o}{1-w_{sp}} \left[\frac{1}{B} - \frac{R}{\phi_e} \right] \end{aligned} \quad (20)$$

Also, Figure 1 should indicate that the positive direction for the normal velocity v is outward from the plate rather than toward the plate.