Phase Steam-Water Pressure Drops, H. S. Isbin, R. H. Moen, R. O. Wickey, D. R. Mosher, and H. C. Larson. Frictional pressure drops for steam-water mixtures have been determined for the following ranges of conditions: pressure, 25 to 1,415 lb./sq. in. abs.; total flow rate, 454 to 4,350 lb./hr.; and quality from about 0.008 to 0.98. The steam-water mixtures were synthesized by mixing steam and water, and pressure drops were measured for adiabatic flow in horizontal pipes 0.484- and 1.062-in. I.D. The data are compared to standard correlations, and a new restricted correlation is suggested which takes into account the pressure and flow rate dependencies. **Free-Convection Heat Transfer to Water and Mercury in an Enclosed Cylindrical Tube,** J. P. Hartnett, W. E. Welsh, Jr., and F. W. Larsen. Local free-convection heat transfer results are reported for water and mercury with uniform heat flux. The system was found to be inherently quasisteady with the temperature oscillations more pronounced with mercury as the working fluid. Experimental data were also obtained with the tube inclined 30 deg. from the vertical, and the resulting heat transfer performance was found to be significantly increased. **Auxiliary Equipment for Radiochemical Processing,** W. E. Unger. Most radiochemical processing equipment are basically similar to their industrial counterparts. The principal distinguishing differences are details of design, the quality standards to which radiochemical equipment is fabricated, and the massive shielding peculiar to the latter. Examples of both specially designed items, and the adaptation of commercial equipment, including valves, filters, centrifuges, samplers, and carrier-chargers, are described. **Flow Generation, Measurement, and Control,** J. Dunn and H. M. Jones. The design criteria for equipment in a remotely operated aqueous separations plant are presented. Improved materials of construction, seal design, and methods of remote replacement have made it possible to adapt submerged regenerative and deep-well turbine pumps, driven by motors located above and sealed from the tanks, to chemical-separations service. Description of a typical flow-system installation is presented, together with a detailed description of the rotameter-transmitter, amplifier-converter, recorder-controller, and control valve. **Treatment of Radioactive Wastes with Ion Transfer Membranes: Removal of Bulk Electrolytes,** E. A. Mason, E. J. Parsi, and A. J. Giuffrida. Use of anion transfer membranes in electrolytic cells was investigated as a means of removing and separating bulk electrolytes from cationic fission products. Nitric acid and aluminum nitrate were used as typical electrolytes, and sodium was used as a tracer representing cationic species. Deacidification of nitric acid and precipitation of hydrous aluminum oxide in granular form were accomplished. The mechanism of deacidification, effect of operating variables, and stability of membranes to chemical and radiation attack are discussed. A brief cost estimate is included.

ERRATUM

The term k_e in Equations (13) and (15) and in Figure 3 of "Estimation of Stage Efficiency of Simple Agitated Vessels Used in Mixer-Settler Extractors" by Robert E. Treybal appearing on page 202 of the June, 1958, issue should be replaced by (mk_e), where $m = dc_e/dc_D$, the notation being the same as in the paper.

This change results in a slight improvement in the over-all agreement of observed and calculated efficiencies. The correction has been incorporated in the paper "The Economic Design of Mixer-Settler Extractors," page 474 of the December, 1959, issue.