Every heat exchange problem where pressure drop and temperatures are given has a fixed J which indicates how much pressure drop is used for each heat transfer unit. As J also gives the ratio between power requirements and heat transfer capability, it permits a simple estimate of total yearly costs for carrying out heat exchange. Curves based on such cost estimations show that the same value of J can be used for a wide variety of heat exchanger applications with, in each case, a close approach to the economic optimum. Other curves giving the annual profit from heat recovery show that optimum can be approached for a number of heat recovery applications at the same temperature difference. **True Temperature Difference in a 1-2 Divided-Flow Heat Exchanger,** D. L. Schindler and H. T. Bates. The 1-2 divided-flow heat exchanger has been mathematically described in terms of traditional dimensionless quantities. A Ten Broeck chart was constructed having correction-factor parameters for easy comparison with counterflow. In cases where the exit temperatures approach or cross each other, 1-2 exchangers require an excessive surface area, and some other arrangement must be used to increase the effectiveness of heat transfer. The divided-flow exchanger utilized the available temperature difference efficiently and hence represents a marked improvement over the conventional 1-2 exchanger. At the same time the pressure drop in the 1-2 divided-flow exchanger is approximately the same as that in a conventional 1-2 exchanger of equal surface.

ERRATUM

We regret that "Pressure Drop and Power Requirements in a Stirred Fluidized Bed" by Max Leva, which appeared on page 688 of the December, 1960, issue of the *A.I.Ch.E. Journal*, was omitted from the index. We would appreciate it if all subscribers would insert it in its proper place in the index for 1960 for future reference.

Computer Program Abstracts

Readers of the *A.I.Ch.E. Journal* who are interested in programming for machine computation of chemical engineering problems will find in each issue of *Chemical Engineering Progress* abstracts of programs submitted by companies in the chemical process industries. Collected by the Machine Computation Committee of the A.I.Ch.E., these programs will be published as manuals where sufficient interest is indicated. The following abstracts have appeared this year:

CEP (October, 1960), p. 86

- Platinum Resistance Thermometer Conversion Table (038)
- A Design Method for Economical Drying of Moisture from Solids (057)
- Molecular Weight by Light Scattering (062)

CEP (November, 1960), p. 70

- Least Squares Fit to Relaxation Equation (050)
- Design of Optimum Multifactorial Experiments (064)

CEP (January, 1961), p. 90

- Comparison of Means (Scheffe' Test) (063)
- NY BWR1 and NY TEQ1 (065)

CEP (February, 1961), p. 80

- Analysis of Variance (067)
- Thermal Rating of Shell and Tube Heat Exchangers—Condenser or Heater—Vapor in Tubes (069)