

be made better known to chemical engineers whose problems abound in multistage decision processes. **Reaction Kinetics Optimization Using Nonlinear Estimation**, T. I. Peterson. The result of this investigation indicate that several mechanisms may be plausible representations for a given set of experimental data. Such ambiguity may possibly be resolved by further experimentation or through independent information.

# Computer Program Abstracts

Readers of the *A.I.Ch.E. Journal* who are interested in programing 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 (March, 1961), p. 88

A General Equation Solver for Engineering Computations (068)

Traverse Closure and Curve Data Program (072)

CEP (April, 1961), p. 88

Fisher's F-Distribution (071)

Thermodynamic Functions of Monatomic Gases (073)

CEP (May, 1961), p. 78

Computer Program for the Construction of a Table of Temperature vs. Resistance for a Platinum Resistance Thermometer (054)

Computer Program for Evaluation of Free Energy of Formation Temperature Functions (074)

## ERRATUM

The caption for Figure 2 appeared under Figure 3 and vice versa for "Extractive Reaction: Batch and Continuous-Flow Chemical Reaction Systems Dilute Case" by Edgar Piret, W. H. Penney, and P. J. Trambouze which appeared on page 394 of the September, 1960, issue of the *A.I.Ch.E. Journal*.

## BOOKS

**Transport Phenomena**, R. B. Bird, W. E. Stewart, and E. N. Lightfoot, John Wiley and Sons, Inc., New York (1960). 780 pages. \$11.50.

In the opinion of the reviewer this book is probably one of the most important texts to appear in the field of chemical engineering in many years. Indeed there is little doubt that the consideration of transport phenomena as a distinct engineering subject can and should have a great impact on engineering in general, far beyond its immediate usefulness and application to chemical engineering.

The authors have endeavored to develop from fundamental principles the topics of momentum, energy, and mass transport in a rigorous manner and then, through the use of many problems, to point out the applications of these topics to subjects of engineering interest. Diligent pursuit of the material included in the text leads to a good idea of the meaning of engineering science and the importance of this approach, particularly to those who may be convinced that the term is only a combination of two words sitting in somewhat uneasy proximity to one another.

The text is concerned with molecular and turbulent transport processes, and encompasses both the rigorous developments allowable for molecular transport and the approximations or empiricisms necessary