

provide insights into a specific problem area. The orientation of the papers is toward the construction and application of models which are usually based on a linear-programming or integer-programming analysis or on simulation. Little discussion centers on algorithms or policy application.

Over 80 percent of the text is devoted to detailed studies of the petroleum and chemical industry, food and agriculture, and metals and metalworking. A short two-chapter section of 41 pages discusses the application of process analysis to investment planning for newly developing countries.

The chapters relating to industrial applications are quite detailed; they provide a comprehensive discussion of the technology involved, its representation by an analytic model, and the sources of data and problems associated with such applications.

This book is composed of the proceedings of a conference held at Yale University in April 1961. The contributions hold up well, but the developments of the past several years in economics and in computing are necessarily absent.

The mathematician can read this monograph with profit for the detailed case studies describing the construction and use of mathematical models of complex phenomena. The economist can read this monograph with profit for the detailed case studies of analyzing a complete industry, separating the wheat from the chaff, and to appreciate the power of analytical descriptions of the technological processes.

JACK MOSHMAN

**30 [X].**—CHRISTIAN GRAM, EDITOR, *Selected Numerical Methods*, Regnecentralen, Copenhagen, 1962, ix + 308 p., 24 cm. Price D.kr. 70,—.

This book contains four survey articles prepared at the Danish Institute of Computing Machinery by a study group for numerical analysis. As stated in the preface, "Only a small part of the present report . . . represents . . . research; the bulk . . . is a description and treatment of papers by other authors with the purpose of estimating and comparing different numerical methods." The four articles, their authors, and their lengths are:

(1) Linear Equations, C. Andersen and T. Krarup, 28 pages.

(2) Partial Differentive Equations, C. Gram, P. Naur, E. T. Poulsen, 85 pages.

(3) Conformal Mapping, C. Andersen, S. E. Christiansen, O. Møller, and H. Thornhave, 148 pages.

(4) Polynomial Equations, T. Busk and B. Svejgaard, 34 pages. Each article contains theoretical background material and a selected number of methods. Scattered through the text are ALGOL codes and numerical examples. All in all, this is a useful book to have around.

P. J. D.

**31 [X].**—NATHANIEL MACON, *Numerical Analysis*, John Wiley & Sons, Inc., New York, 1963, xiii + 161 p., 24 cm. Price \$5.50.

This book is written as a text for an introductory one-semester course in numerical analysis. A good introductory course in calculus will suffice for prerequisite to a course using this book as a text. The book is machine oriented. In several instances,