

technical journals and forgetting about personal intercommunication. I think it particularly unfortunate, then, that the discussion section has been cut so badly as to be useless in parts.

Analysis of Linear Systems. By David K. Cheng. 431 pp. Addison-Wesley Publishing Co., Inc., Reading, Mass., 1959. \$8.50. *Reviewed by W. T. Wintringham, Bell Telephone Laboratories.*

AS circuit analysis and design become increasingly sophisticated, greater and greater dependence is being placed on advanced mathematical techniques. This is not a new situation. Throughout the years the analysis of linear circuits has progressed through the addition of improved mathematical methods. But, oddly enough, most textbooks in this field are written by electrical engineers instead of by mathematicians. Listing a few names at random—Bode, Gardner and Barnes, Guillemin, Middelndorf, Schelkunoff, Seshu and Balabanian, and Weber—we find only a small minority who might be called professional followers of Muse.

Cheng fits into the pattern, since he is an electrical engineer. And, as is so often the case, his book *Analysis of Linear Systems* is a good one.

Cheng has chosen a method of presentation which makes his book of particular value as a text. He has elected to interleave—in successive chapters—electrical and mathematical principles. We find a chapter on elementary linear circuits followed by one on the classical methods for solving linear differential equations. Chapters on lumped-constant electrical and mechanical systems are followed by chapters on the Fourier and the Laplace transforms. The subject of feedback in linear systems is used as an excuse to introduce flow graphs, and serves as a springboard for the treatment of sampled systems by the *Z* transformation. Problems illustrating the subject matter are included in each chapter, and answers are appended to the book.

Methods for the numerical solution of the common algebraic equations and a short table of Laplace transforms are given in appendixes.

The author states, his book may be used either in advanced undergraduate or beginning graduate courses. It should prove useful in this area.

Atlas of γ -Ray Spectra from Radiative Capture of Thermal Neutrons. By L. V. Groshev, V. N. Lutsenko, A. M. Demidov, and V. I. Pelekhov. Translated from Russian by J. B. Sykes. 198 pp. Pergamon Press, London & New York, 1959. \$20.00. *Reviewed by Evans Hayward, National Bureau of Standards.*

THIS atlas is frankly a compilation of data. In it the authors have collected the results available up to January, 1958, on the gamma-ray spectra produced in thermal neutron capture. The introduction contains an almost too brief discussion and evaluation of the methods by which the data have been obtained. This is

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