

SENIOR STAFF OPENINGS IN BASIC RESEARCH

The Boeing Scientific Research Laboratories are engaged in a program of fundamental research designed to make major contributions to the progress of the aeronautical sciences. High-level staff positions are open now in the fields of

Gas Dynamics
Plasma Physics
Mathematics
Solid State Physics
Electronics
Physical Chemistry

Boeing grants scientists the latitude and independence needed to achieve and maintain leadership in their special fields. Scientists interested in carrying on their work in this kind of stimulating research environment are invited to communicate with Mr. G. L. Hollingsworth, Associate Director of Scientific Research Laboratories

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ined. In addition to the mathematical treatment of double refraction, this chapter contains considerable discussion of the methods of measurements of the photoelastic constants and many interesting notes pertaining to the historical development of the topic.

Specific problems of stress-strain analysis which can be examined experimentally by the photoelastic method are treated in the next three chapters. There follows a chapter dealing with the difficulties and techniques of testing of materials. The book is then concluded with a consideration of the use of the photoelastic method for the investigation of stress in structures and machines.

The chief weaknesses of this book are associated with the date of writing. While many archaic points can be ignored, this volume does not contain a treatment of three-dimensional stress analysis, which is undoubtedly the most important development in photoelasticity since the first edition.

The Tree of Mathematics. Edited by Glenn James. 20 contributors. 403 pp. The Digest Press, Pacoima, Calif., 1958. \$6.00. *Reviewed by P. J. Davis, National Bureau of Standards.*

This is a collection of 27 expository articles on various topics in mathematics. Written by 21 authors, the articles range from high-school algebra to the theory of games, stopping at such intermediate places as infinite series, differential geometry, projective geometry, abstract sets, and group theory. The articles are highly uneven in length and quality. Some of them seem to be encyclopedia articles. Some seem to be technical survey articles and there are several very good ones. Some contain watered down material from standard textbooks. Some articles have the flavor of a professor trying hard to interest an audience of students in his specialty. Some have problems to work and some are on the frontiers of research. I can't say I understand the grand plan of the book. There is a picture on the outside cover which shows mathematics as a tree. The roots, the trunk, and the branches are labeled with the names of various mathematical subjects. But the book contains little that bears directly on the interrelationships depicted. Yet, I think it might be useful for undergraduate collateral reading. Readers of this magazine might like to take a look at the chapters on matrices, elements of a theory of probability, dynamic programming, and the theory of games.

Communication, Organization, and Science. By Jerome Rothstein. Foreword by C. A. Muses. 206 pp. The Falcon's Wing Press, Indian Hills, Colo., 1958. \$3.50. *Reviewed by R. Bruce Lindsay, Brown University.*

Information theory continues to attract the attention of scientists and engineers in general and physicists in particular. Many excellent books dealing with it on various levels of mathematical sophistication have appeared during the past few years. In the present volume