*action of Mesons with Matter, Production of Mesons in Cosmic Radiation,* and *Occurrence of Mesons in Cosmic Radiation.*

The casual reader in this field is often puzzled and dismayed by the confusing choice of names for mesons. Dr. Thorndike has clearly described each meson and its properties including the phenomenologically defined $\sigma$ and $\rho$ mesons, first defined by the Bristol group.

The reviewer can recommend this book as an excellent elementary introduction to the field of meson physics. If more detail both experimental and mathematical is desired, it can be followed by references to the literature and to a new book by Professor Marshak entitled *Meson Physics* (McGraw-Hill Book Company, New York City, 1952). The field of meson physics is expanding rapidly and, as one expects, a great deal of new information has become available during the past year and following the editing date of this book. As an example, the reader is referred to the Proceedings of the Third Annual Rochester Conference on High-Energy Physics.

**R. Ronald Rau**
*Princeton University*

## High-Energy Nuclear Physics

Last December, more than 100 physicists attended the Third Annual Rochester Conference to discuss experimental and theoretical advances in high-energy nuclear physics. The University of Rochester has now printed the *Proceedings* of the conference, copies of which may be obtained from Interscience Publishers, Inc., 250 Fifth Avenue, New York City, at a price of $2.00. The May 1953 issue of *Physics Today* contained a summary of the conference written by H. P. Noyes of the Rochester physics department, one of the editors of the present volume. The other editors are M. Camac and W. D. Walker. The National Science Foundation served as a co-sponsor of the conference, together with a group of Rochester industries that had also provided support for the first two conferences.

## Mass Spectroscopy

The *Proceedings* of a symposium on Mass Spectroscopy in Physics Research, held at the National Bureau of Standards September 6–8, 1951, includes papers presented by outstanding physicists from the United States and ten other countries. Although several chemistry conferences have been concerned with the role of mass spectroscopy in research and analysis, the 1951 NBS symposium provided physicists with their first comparable opportunity to discuss advances in mass spectroscopy of particular interest in the field of physics. The volume, which in most cases gives a fairly complete record of the discussions following the papers, summarizes a decade of work in mass spectroscopy and its use in physics research. (National Bureau of Standards Circular 522; 273 pp.; order from Government Printing Office, Washington 25, D. C., $1.75.)

## Books Received

GASDYNAMIK. By Klaus Oswatitsch. 456 pp. Springer-Verlag, Vienna, Austria, 1952. $18.60.

TECHNISCHE ELECTRODYNAMIC. Vol. I. Berechnung Magnetischer Felder. By Franz Ollendorff. 432 pp. Springer-Verlag, Vienna, Austria, 1952. $15.70.

VACUUM TECHNIQUE. By Arnold L. Reimann. 449 pp. Chapman and Hall Ltd., London, 1952. 50s.

AN ANNOTATED BIBLIOGRAPHY OF SELECTED REFERENCES ON THE SOLID-STATE REACTIONS OF THE URANIUM OXIDES. By S. M. Lang. 95 pp. National Bureau of Standards Circular 535, U. S. Government Printing Office, Washington, D. C., 1953. $0.30.

THE PHILOSOPHY OF SCIENCE. By Stephen Toulmin. 176 pp. Hutchinson's University Library, London; Longmans, Green and Co., Inc., New York, 1953. $2.25.

REPORT OF THE COMMITTEE ON THE MEASUREMENT OF GEOLOGIC TIME 1951–1952. National Research Council. 151 pp. Publication 245, National Academy of Sciences, National Research Council, Washington, D. C., 1953. Paperbound, $1.50.

SPEECH AND HEARING IN COMMUNICATION. By Harvey Fletcher. 461 pp. The Bell Telephone Laboratories Series. D. Van Nostrand Company, Inc., 1953. $9.75.

WAVES AND TIDES. By R. C. H. Russell and D. H. MacMillan. 348 pp. Philosophical Library, New York, 1953. $6.00.

GRUNDLAGEN DER ELEKTRONENOPTIK. By Walter Glaser. 699 pp. Springer-Verlag, Vienna, Austria, 1952. $28.60.

THE VIENNA CIRCLE. The Origin of Neo-Positivism. By Victor Kraft. 209 pp. Philosophical Library, New York, 1953. $3.75.

FROM LODESTONE TO GYRO-COMPASS. By H. L. Hitchins and W. E. May. 219 pp. Philosophical Library, New York, 1953. $4.75.

WHAT IS SCIENCE? By Norman Campbell. 186 pp. Dover Publications, Inc., New York, 1953. Clothbound, $2.50; paperbound, $1.25.

ELEMENTS OF THE THEORY OF FUNCTIONS. By Konrad Knopp. 140 pp. Dover Publications, Inc., New York, 1953. Clothbound, $2.25; paperbound, $1.25.

THE THEORY OF ELECTRONS AND ITS APPLICATIONS TO THE PHENOMENA OF LIGHT AND RADIANT HEAT (Second Edition). By H. A. Lorentz. 343 pp. Dover Publications, Inc., New York, 1953. Clothbound, $3.50; paperbound, $1.70.

LECTURES ON CAUCHY'S PROBLEM IN LINEAR PARTIAL DIFFERENTIAL EQUATIONS. By Jacques Hadamard. 316 pp. Dover Publications, Inc., New York, 1953. Clothbound, $3.50; paperbound, $1.70.

A GENERAL DEGREE PHYSICS. Part I. The General Properties of Matter. By C. J. Smith. 580 pp. Edward Arnold and Co., London; Longmans, Green and Co., Inc., New York, 1953. $9.50.

VACUUM-TUBE OSCILLATORS. By William A. Edson. 476 pp. John Wiley and Sons, Inc., New York, 1953. $7.50.

EVERYDAY PHYSICS. By Ole A. Nelson and John G. Winans. 614 pp. Ginn and Company, Boston, Massachusetts, 1952. $4.36.

MECHANICS OF MATERIALS. By Seibert Fairman and Chester S. Cutshall. 420 pp. John Wiley and Sons, Inc., New York, 1953. $5.75.