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A precision instrument for measuring the rotation of the plane of polarization of all optically active substances. Big advantage is its glass circle instead of a metal circle. The scale on glass, instead of on metal, in conjunction with a micrometer plate, permits direct reading without vernier, resulting in greater speed and precision of reading. Glass circle is rigidly connected with the analyzer and carries two scales, an angular scale in degrees arc, and a scale in international sugar degrees. Sodium vapor lamp is an integral part of the instrument and is always in alignment and ready for use.

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#### Bulletin SH-344 on request



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ther Topics, some dozen topics are mentioned in 10 pages and these cover the field from Effects of Earthquakes to Seismic Prospecting and Atomic Bombs. As a result, little is learned from such a hurried treatise.

The revised edition does contain a major change in the addition of a list of classified references. The list, although fairly well chosen, is by no means complete. Again, a reader would like something more comprehensive than has been offered. The section on Seismic Prospecting should mention the textbooks by Leet, Nettleton, Heiland, Jakowsky, Dobrin, Dix, and others, These are the most complete textbooks to be found in the English language for this classification of seismology. The references to articles in geophysical journals would number many more.

The book is well bound and the type is both attractive and clear. In general, it provides a handy reference book for a teacher, and parts of it, as mentioned earlier, represent a comprehensive exposé for the student.

DANIEL LINEHAN, S.J.

The Observatory, Weston College

#### Les Groupes Sanguins Chez l'Homme: Etude Sérologique et Génétique. Jacques Ruffié. Masson, Paris, 1953, 207 pp. 1200 fr.

This new work is notable for its up-to-dateness and complete coverage of the field. It presents an admirable summary of the work of the last few years in blood grouping, yet manages to cover the salient historical facts also.

Starting with a general chapter, the author discusses successively the ABO system, the Lewis, MNS and PQ systems, the Rh system, and the Lutheran, Kell-Cellano, Duffy, Kidd, Jay, Vel, Levay, Jobbins, Graydon, Ven and Miltenberger factors and systems. Finally, a few pages (too few in the opinion of this reviewer) are devoted to the principles of probability.

The treatment of the ABO system is noteworthy for its coverage of recent discoveries and theories. Here one finds good accounts of the subgroups of A and AB, of the H antigen of Morgan, of Hirszfeld's theory of pleiades, the theory of Morgan and Watkins, and the new ABO blood group found in Bombay.

The treatment of the Rh system is outstanding. The immunological and genetical bases are stressed. The theories of Wiener and those of Fisher, and the Wiener and Race-Fisher notations are clearly presented and compared. The author is definitely in favor of the theory and notation of Fisher.

Although practically no mathematics is used, methods of calculation of gene frequencies are discussed, and nomograms are given for the calculations of the gene frequencies p and q and  $\sigma_{\rm D}$  for the ABO system.

It is difficult to find vulnerable points to criticize. Probably because of the author's desire to be up to date, earlier work is often skimpily referred to or omitted entirely. For example, the fact that nomograms which do exactly what is claimed for those in this volume have been constructed by other workers and appear in a number of books (Hirszfeld, Schiff, and Boyd) is not mentioned. Also the book contains a number of misprints; fortunately they are for the most part amusing rather than serious. Thus the author Barbara E. Dodd masquerades through pages and pages as Dood. These are very minor flaws in an otherwise excellent treatise.

This volume serves as a very clear exposition of the present state of the rapidly expanding, subject of blood groups, very modern in outlook and bibliography, which should be useful to all who can read French.

WILLIAM C. BOYD

Department of Biochemistry Boston University School of Medicine

### New Books

- Le Mécanisme de la Vision des Couleurs: Physiologie-Pathologie. J. Segal. G. Doin, Paris, 1953. 351 pp. Illus. + colored plate. 3000 fr.
- Great Systems of Yoga. Ernest Wood. Philosophical Library, New York, 1954. 168 pp. \$3.50.
- Metabolism of Steroid Hormones. Ralph I. Dorfman and Frank Ungar. Burgess, Minneapolis, Minn., 1953. 170 pp. Ilius. \$4.00.
- In Quest of a New Ethics. Charles Mayer; trans. by Harold A. Larrabee. Beacon Press, Boston, 1954. 321 pp. \$4.00.
- Formaldehyde. 2nd ed. American Chemical Society Monograph #120. J. Frederic Walker. Reinhold, New York, 1953. 575 pp. Illus. \$12.00.
- Physics: Principle, and Applications. 2nd. ed. Henry Margenau, William W. Watson, and C. G. Montgomery. McGraw-Hill, New York-London, 1953. 814 pp. Illus. \$7.50.
- Modern Electroplating. Sponsored by the Electrochemical Society, Inc. Allen G. Gray, Ed. Wiley, New York; Chapman & Hall, London, 1953. 563 pp. Illus. \$8.50.
- Organic Chemistry. 2nd ed. Howard J. Lucas. American Book, New York, 1953. 726 pp. \$7.00.
- Prestressed Concrete. Y. Guyon. Edited by W. M. Johns; trans. by A. J. Harris, J. D. Harris, and T. O. Lazarides. Wiley, New York; Contractors Record, London, 1953. 543 pp. Illus. \$12.00.
- Clay Mineralogy. Ralph E. Grim. McGraw-Hill, New York-London, 1953. 384 pp. Illus. \$9.00.
- Enumeratio Spermatophytarum Japonicarum, Vol. II. A bibliographic enumeration of flowering plants indigenous to or long cultivated in Japan and its adjate 7 islands. Hiroshi Hara. Iwanami Shoten, Tokyo, 1952. 280 pp. + index of genera. 900 yen.
- Tests and Standards for New and Nonofficial Remedies. The Chemical Laboratory, American Medical Association. Lippincott, Philadelphia-London, 1953. 327 pp. \$4.00.
- The Dawn of the Post-Modern Era. Dimensions of human life in the last half of the twentieth century. Elwyn Judson Trueblood. Philosophical Library, New York, 1954. 198 pp. \$3.75.
- Twenty-five Years of Sex Research. History of the National Research Council Committee for Research in Problems of Sex, 1922–1947. Sophie D. Aberle and George W. Corner. Saunders, Philadelphia-London, 1953. 248 pp.



May 14, 1954

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#### HUMAN DEVELOPMENT

By JOHN P. ZUBEK, University of Minnesota, and PATRICIA ANNE SOLBERG, Department of National Health and Welfare, Ottawa, Ontario. 444 pages, \$6.00

Bio-socially oriented, this new volume provides an experimental, topical treatment of the entire span of human development. The authors present in each chapter a brief picture of the evolutionary development and then follow the subject from conception through old age, enabling the reader to get an integrated and continuous picture of the life span development and decline. Equal emphasis is placed on each of the major periods of life and particular attention is given to post World War II research on maturity and old age. Students, researchers, and professional workers will find this a valuable contribution to the field.

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## Meetings & Conferences

#### June

- 15-13. Medical Library Assoc., Washington, D.C. (Col. F. B. Rogers, Armed Forces Medical Library, Washington 25.)
- 16-18. Symposium on Solution of Electrolytes, New Haven, Conn. (R. T. Gucker, Jr., Dept. of Chemistry, Indiana Univ., Bloomington.)
- 16-19. Colloquium of College Physicists, annual, Iowa City, Iowa. (G. W. Stewart, Dept. of Physics, State Univ. of Iowa, Iowa City.)
- 17-19. The Endocrine Soc., Sir Francis Drake Hotel, San Francisco, Calif.
- 18-19. American Rheumatism Assoc., annual, San Francisco, Calif. (W. H. Kammerer, 33 E. 61 St., New York 21.)
- 18-20. American Soc. for the Study of Sterility, Sir Francis Drake Hotel, San Francisco, Calif.
- 18-22. Canadian Medical Assoc., Vancouver, Can. (General Sec., 135 St. Clair Ave., West, Toronto 5.)
- 19-20. Soc. for Investigative Dermatology, San Francisco, Calif. (H. Beerman, 255 S. 17 St., Philadelphia 3, Pa.)
- 20-22. Conf. on Liquid Structure and Acoustics, Providence, R.I. (R. B. Lindsay, Dept. of Physics, Brown Univ., Providence.)
- 20-23. American Astronomical Soc., Ann Arbor, Mich. (C. M. Huffer, Washburn Observatory, Madison 6, Wis.)
- 20-23. American Soc. of Agricultural Engineers, annual, Minneapolis, Minn. (F. B. Lanham, ASAE, St. Joseph, Mich.)
- 20-24. American Soc. of Medical Technologists, Miami Beach, Fla. (R. Matthaei, Suite 25, Hermann Professional Bldg., Houston 25, Tex.)
- 20-25. American Inst. of Chemical Engineers, Ann Arbor, Mich. (D. L. Katz, Dept. of Chemical Engineering, Univ. of Michigan, Ann Arbor.)
- 20-25. American Soc. of Mechanical Engineers, semiannual, Pittsburgh, Pa. (C. E. Davies, 29 W. 39 St., New York.)
- 20-25. International Meeting on Chemical Engineering Aspects of Nuclear Processes, Ann Arbor, Mich. (D. L. Katz, Dept. of Chemical Engineering, Univ. of Michigan, Ann Arbor.)
- 20-26. American Library Assoc., annual, Minneapolis, Minn. (D. H. Clift, 50 E. Huron St., Chicago 11, Ill.)
- 20-10. National Training Laboratory in Group Development, Bethel, Me. (L. P. Bradford, 1201 16 St. NW, Washington 6, D.C.)
- 21-23. Chemical Inst. of Canada, 37th annual, Toronto, Can. (D. W. Emmerson, 18 Rideau St., Ottawa 2.)
- 21-24. Agricultural Inst. of Canada and Canadian Phytopathological Soc., annual, Macdonald College, Canada.
  (A. J. Skolko, Div. of Botany and Plant Pathology, Central Exptl. Farm, Ottawa, Ont.)
- 21-25. Alpha Chi Sigma Fraternity, annual, East Lansing, Mich. (J. R. Kuebler, 5503 E. Washington St., Indianapolis 19, Ind.)
- 21-25. American Inst. of Electrical Engineers, summer general and Pacific general, Los Angeles, Calif. (H. H. Henline, 33 W. 39 St., New York 18.)
- 21-25. Ecological Soc. of America, western section, Pullman, Wash. (J. W. Marr, Dept. of Biology, Univ. of Colorado, Boulder.)

(See the April 16th issue for summer meeting lists.)

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