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This comprehensive report outlines the fascinating story of the people, projects, facilities and working climate that compose the Cornell Aeronautical Laboratory. It tells of the professional challenges met by C.A.L.'s engineers and scientists, and it shows why C.A.L. is one of the nation's respected research centers.

WRITE J. T. KANE
CORNELL AERONAUTICAL
LABORATORY
OF CORNELL UNIVERSITY
BUFFALO 21, NEW YORK

classical problems, (b) to establish consistency in the existing physical theory, and (c) to verify for the reader the new findings of information theory. Brief but interesting mention is also made of the directions which nonobjective information theories might take. Because of the relative infancy of the subject and the book's accent on a physical rather than mathematical approach, Science and Information Theory is not a definitive treatise. However, it is likely to remain for some time as the outstanding primer on the subject for the interested engineer-physicist.

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Books Received

ASTRONOMY AND PHYSICS. Vol. 3 of Proceedings of the 3rd Berkeley Symp. on Mathematical Statistics and Probability. (U. of California, Dec. 1954 & July-Aug. 1955) Edited by Jerzy Neyman. 252 pp. U. of California Press, Berkeley & Los Angeles, Calif., 1956. \$6.25.

THERMODYNAMIK. Vol. 4 of Einführung in die Theoretische Physik. By Werner Döring. 107 pp. Walter de Gruyter & Co., Berlin, Germany, 1956. Paperbound DM 2.40.

DICTIONARY OF PHOTOGRAPHY (18th Edition). Edited and revised by A. L. M. Sowerby. 719 pp. (Iliffe, England) Philosophical Library, New York, 1956. \$10.00.

RADIOISOTOPES: A Non-Technical Sourcebook On Practical Uses of Radioisotopes in Industry. Edited by Walter A. Shead. 90 pp. The Atomic Energy Guideletter, Washington, D. C., 1956. Paperbound \$7.50.

CURRENTS, FIELDS, AND PARTICLES. By Francis Bitter. 599 pp. The Technology Press of Massachusetts Inst. of Technology & John Wiley & Sons, Inc., New York, 1956. \$8.50.

PROCEEDINGS OF THE SECOND MIDWESTERN CONFERENCE ON SOLID MECHANICS. (Purdue U., Sept. 1955) 251 pp. Purdue U., Lafayette, Ind., 1956. Clothbound \$5.50; paperbound \$5.00.

HANDBUCH DER PHYSIK. Edited by S. Flügge. Springer-Verlag, Berlin, Germany, 1956. Vol. 22, Gas Discharges II; 652 pp.; DM 128.00 (if part of series DM 102.40). Vol. 36, Atoms II; 424 pp.; DM 88.00 (if part of series DM 70.40).

CIRCUIT THEORY AND DESIGN. By John L. Stewart. 480 pp. John Wiley & Sons, Inc., New York, 1956. \$9.50.

PROGRESS IN COSMIC RAY PHYSICS. Vol. III. Edited by J. G. Wilson. 420 pp. (North-Holland, Holland) Interscience Publishers, Inc., New York, 1956. \$10.50.

MATRIX CALCULUS. By E. Bodewig. 334 pp. (North-Holland) Interscience Publishers, Inc., New York, 1956. \$7.50. ATOMIC QUEST: A Personal Narrative. By Arthur Holly Compton. 370 pp. Oxford U. Press, New York, 1956. \$5.00. AN INTRODUCTORY COURSE IN COLLEGE PHYSICS (4th Edition). By Newton Henry Black and Elbert Payson Little. 786 pp. The Macmillan Co., New York, 1956. \$6.75.

PROCEEDINGS 1956, ELECTRONIC COMPONENTS SYMPOSIUM (Washington, D. C., May 1956). 240 pp. Engineering Publishers, New York, 1956. Paperbound \$5.00.

ELEMENTS OF X-RAY DIFFRACTION. By B. D. Cullity. 514 pp. Addison-Wesley Publishing Co., Inc., Reading, Mass., 1956. \$10.00.

Théorie et Technique de la Radiocristallographie (2nd Edition). By A. Guinier. 736 pp. Dunod, Paris, France, 1956. 9.500 fr.

TRANSPORT PROCESSES IN APPLIED CHEMISTRY. By R. C. L. Bosworth. 387 pp. John Wiley & Sons, Inc., New York, 1956. \$12.00.

ORGANIZATION OF THE FEDERAL GOVERNMENT FOR SCIENTIFIC ACTIVITIES. National Science Foundation (NSF 56-17). US Government Printing Office, Washington, D. C., 1956. Paperbound \$1.75.

ADVANCES IN CATALYSIS AND RELATED SUBJECTS, Vol 8. Edited by W. G. Frankenburg, V. I. Komarewsky, E. K. Rideal, P. B. Weisz. 353 pp. Academic Press Inc., New York, 1956, \$10.00.

STATISTISCHE THERMODYNAMIK. By Arnold Münster. 852 pp. Springer-Verlag, Berlin, Germany, 1956. DM 138.00.

ANNUAL REVIEW OF PHYSICAL CHEMISTRY, Vol. 7, Edited by H. Eyring. Associate editors, C. J. Christensen, H. S. Johnston. 503 pp. Annual Reviews, Inc., Palo Alto, Calif., 1956. \$7.00.

SPECTROSCOPY AT RADIO AND MICROWAVE FREQUENCIES. BY D. J. E. Ingram. 332 pp. Philosophical Library, Inc., New York, 1956. \$15.00.

VACUUM DEPOSITION OF THIN FILMS. By L. Holland. 541 pp. John Wiley & Sons, Inc., New York, 1956. \$10.00.

LIGHT-SCATTERING IN PHYSICAL CHEMISTRY. By K. A. Stacey. 230 pp. Academic Press Inc., New York, 1956.

MOLYBDENUM, Vol. 5 of Metallurgy of the Rarer Metals, By L. Northcott. 222 pp. (Butterworths, England) Academic Press Inc., New York, 1956. \$6.80.

PROCEEDINGS OF THE SYMPOSIUM ON THE PHYSICS OF FIS-SION (Chalk River, May 1956). AECL No. 329. Edited by G. C. Hanna, J. C. D. Milton, W. T. Sharp, N. M. Stevens, E. A. Taylor, 414 pp. Atomic Energy of Canada Ltd., Chalk River, Ont., Canada, 1956. Paperbound \$5.00.

LA QUANTIFICATION EN THÉORIE FONCTIONNELLE DES COR-PUSCULES. By Jean-Louis Destouches. 141 pp. Gauthier-Villars, Paris, France, 1956. Paperbound \$5.84.

ENERGY LOSS AND RANGE OF ELECTRONS AND POSITRONS. By Ann T. Nelms. 30 pp. NBS Circular 577. National Bureau of Standards, Washington, D. C., 1956. Paperbound \$.30.

SUGGESTED PRACTICES FOR ELECTRICAL STANDARDIZING LABO-RATORIES. By Francis B. Silsbee. 9 pp. NBS Circular 578. National Bureau of Standards, Washington, D. C., 1956. Paperbound \$.15.

STANDARD X-RAY DIFFRACTION POWDER PATTERNS. By H. E. Swanson, N. T. Gilfrich, M. I. Cook. 62 pp. NBS Circular 539, Vol. 6. National Bureau of Standards, Washington, D. C., 1956. Paperbound \$.40.

IMAGES OPTIQUES. By Pierre Fleury and J.-P. Mathieu. 530 pp. Editions Eyrolles, Paris, France, 1956. Clothbound 5.115 fr.; paperbound 4.900 fr.

RAYONNEMENTS DE PARTICULES ATOMIQUES ÉLECTRONS ET PHOTONS. By André Berthelot. 192 pp. Masson et Cie, Paris, France, 1956. Paperbound 1.800 fr.

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ÉLECTRICITÉ (6th Revised Edition). By G. Goudet. 899 pp. Masson et Cie, Paris, France, 1956. Clothbound 5.100 fr.; paperbound 4.500 fr.

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