

Atomic Energy Research at Harwell. K. E. B. Jay. Philosophical Library, New York, 1955. 144 pp. Illus. + plates. \$4.75.

The large all-embracing atomic energy laboratories, such as Harwell, or Argonne, or Chalk River, are perhaps the most characteristic postwar scientific organizational developments. These and similar institutions were founded to meet the demands of our highly sophisticated modern technology. They reflect the growing interdependence of the sciences, the gradual blurring of the lines that traditionally have separated the scientific disciplines.

To describe the workings of such an institution is like wandering, as on a Cook's tour, through much of modern science and technology. K. E. B. Jay has covered one segment of this vast ground, Harwell, concisely and with authority. His little book takes one first through the applied projects at Harwell—significantly described as the “main programmes”—continues with a description of how some of the administrative headaches in an enormously large laboratory are dealt with, and then, in descriptions that are sometimes fairly detailed and are always knowledgeable, he covers the basic research at Harwell. His topics range from radioactive waste disposal to capture of μ mesons, from turbulence of air to diffusion of argon in silver.

Reading this description of Harwell inevitably invites comparison with the American atomic energy establishments. There is a sort of isomorphism between Harwell and, say, Oak Ridge; it is almost as if the same volume could be used as a description of Oak Ridge or Argonne (or, I suppose, of Saclay or the yet-unnamed U.S.S.R. establishments), if only the names of the people were changed.

Harwell and its American counterparts are such large establishments that in each of them a fair cross section of the scientific personnel of Britain and the United States are represented. These personnel are the products of the respective educational systems, British and American. In this sense the laboratories are large-scale proving grounds for the efficiency of their countries' scientific educational systems; the relative success of these laboratories is a measure of the success of the educational systems that produce them. To judge the over-all merit and success of such large enterprises as Harwell, and, thus, to weigh how the scientific educational systems that underlie them are working, is at best very difficult. Jay's book should be useful in helping scientists outside the British atomic energy framework make such estimates of the United Kingdom effort.

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Books Reviewed in

The Scientific Monthly, March

Adaptive Human Fertility, P. S. Henshaw (Blakiston Div., McGraw-Hill). Reviewed by J. T. Velardo.

General Chemistry, L. E. Steiner and J. A. Campbell (Macmillan). Reviewed by E. L. Gamble.

The Underwater Naturalist, P. de Latil (Houghton Mifflin). Reviewed by J. W. Hedgpeth.

Volume Jubilaire, Victor Van Straelen, Directeur de l'Institut Royal des Sciences Naturelles de Belgique, 1925-1954, vols. I and II. Institut Royal des Sciences de Belgique. Reviewed by J. M. Berdan.

Salamanders and Other Wonders, W. Ley (Viking Press). Reviewed by T. S. Gardner.

Anxiety and Stress, H. Basowitz, H. Persky, S. J. Korchin, R. R. Grinker (Blakiston Div., McGraw-Hill). Reviewed by H. Selye.

New Books

The Systematic Identification of Organic Compounds. A laboratory manual. Ralph L. Shriner, Reynold C. Fuson, and David Y. Curtin. Wiley, New York, and Chapman & Hall, London, ed. 4, 1956. 426 pp. \$6.

College Physics. C. E. Mendenhall, A. S. Eve, D. A. Keys, and R. M. Sutton. Heath, Boston, ed. 4, 1956. 660 pp. \$6.25.

Aircraft Today. John W. R. Taylor, Ed. Philosophical Library, New York, 1955. 98 pp. \$4.75.

Plane Trigonometry. Alfred L. Nelson and Karl W. Folley. Harper, New York, ed. 3, 1956. 134 pp. \$3.50.

Mathematical Theory of Elasticity. I. S. Sokolnikoff. McGraw-Hill, New York, ed. 2, 1956. 476 pp. \$9.50.

Fuel. Solid, liquid and gaseous. J. S. S. Brame and J. G. King. Arnold, London, ed. 5, 1955. 551 pp. \$10.

Chinese Spirit-Medium Cults in Singapore. Monogr. on Social Anthropology No. 14, New Series. Alan J. A. Elliott. Department of Anthropology, London School of Economics and Political Science, London, England, 1955. 179 pp. \$2.80.

A Gallery of Scientists. Rufus Suter. Vantage Press, New York, 1955. 132 pp. \$3.

Advances in Veterinary Science. vol. II. C. A. Brandly and E. L. Jungherr. Academic Press, New York, 1955. 449 pp. \$10.

The Antarctic Challenged. Edward R. G. R. Evans (Admiral Lord Mountevans). De Graff, New York, 1956. 247 pp. \$4.50.

Illuminating Engineering Course. H. Zijl. Philips' Technical Library, Eindhoven, Netherlands, 1955. 241 pp. \$4.50.

Introduction to TV Servicing. For 625- and 525-line receivers. H. L. Swaluw and J. van der Woerd. Philips' Technical Library, Eindhoven, Netherlands, 1955. 264 pp. \$5.50.

Greek Science in Antiquity. Marshall Clagett. Abelard-Schuman, New York, 1955. 217 pp. \$4.75.

A Textbook of Pharmacognosy. N. M. Ferguson. Macmillan, New York, 1956. 374 pp. \$7.

Miscellaneous Publications

(Inquiries concerning these publications should be addressed, not to Science, but to the publisher or agency sponsoring the publication.)

Gravity Survey along the Lines of Precise Levels throughout Japan by Means of a Worden Gravimeter. pt. VI, Chûbu District. Bull., supplementary vol. IV, pt. V. Chuji Tsuboi, Akira Jitsukawa, and Hirokazu Tajima. Earthquake Research Inst., Tokyo Univ., Tokyo, 1955. 112 pp.

National Research Council, Canada. Division of Building Research, Proceedings of the Conference on Building Research, Ottawa, 21-23 October 1953. Bull. No. 1, NRC 3568. National Research Council, Ottawa, Canada, 1955. 137 pp. \$3.50.

California Cooperative Oceanic Fisheries Investigations, Progress Report, 1 July 1953 to 31 March 1955. Marine Research Committee, State of California Dept. of Fish and Game, Sacramento, 1955. 52 pp.

Symposium on Electronics Maintenance. 3-5 August 1955. Advisory Panel on Personnel and Training Research, Office of the Assistant Secretary of Defense, Research and Development, Washington 25, 1955 (Order from Superintendent of Documents, Washington 25). 214 pp. \$1.

Secondary Elasticity. A general mathematical theory of elastic secondary stress in continuous media. Monogr. No. 1, vol. 1, ser. 1. P. L. Sheng. Chinese Association for the Advancement of Science, Taipei, 1955. 137 pp.

International Scientific Radio Union, Proceedings of the XIth General Assembly. Held in The Hague, 23 August-2 September 1954. vol. X, pt. 6, *Commission VI on Radio Waves and Circuits*. The Union, Brussels, 1954. 140 pp. \$3.

The Fifth Amendment and the Immunity Act of 1954. Aspects of the American way. Samuel H. Hofstadter. Fund for the Republic, New York, 45 pp.

Committee on Growth, Ninth Annual Report to the American Cancer Society, Inc., July 1953-June 1954. Division of Medical Sciences, National Academy of Sciences-National Research Council, Washington, D.C., 1955. 299 pp. Free.

Geology of a Portion of the Elsinore Fault Zone, California. Special Rept. 43. John F. Mann, Jr. 22 pp. \$0.75. *Bibliography of Marine Geology and Oceanography, California Coast*. Special Rept. 44. Richard D. Terry. 131 pp. \$0.75. California Division of Mines, San Francisco, 1955.

Atomic Energy of Canada Limited, Annual Report, 1954-55. Atomic Energy of Canada Ltd., Ottawa, Canada, 1955. 17 pp.

Spiral Precipitation Patterns in Extratropical Cyclones. Meteorological Radar Studies, No. 2. John H. Conover. 18 pp. *The Melting Layer*. No. 3. Raymond Wexler. 18 pp. Harvard University, Blue Hill Meteorological Observatory, Milton, Mass., 1955.

Range of 208 ± 4 MEV Protons in G5 Nuclear Emulsion. Notas de Física, vol. II, No. 3. Hervásio G. De Carvalho and Jerome I. Friedman. Centro Brasileiro de Pesquisas Físicas, Rio de Janeiro, 1955. 7 pp.