

liquid surfaces"; "Properties of monolayers"; "Reactions at liquid interfaces"; "Diffusion through interfaces"; and "Disperse systems and adhesion." As might be anticipated from authors who are well known for their outstanding work in colloid and surface chemistry, the material is soundly developed and written with authority, and the literature is well covered. The book, moreover, is unusually good as monographs in colloid chemistry go, in that the authors have taken pains to provide a fuller thermodynamic treatment than is commonly given.

Biologists and biophysicists will find much to interest them in chapters 4, 5, 6, and 7, which deal with phenomena that are characteristic of many biological systems, particularly of those in which diffusion across interfaces is important. Chemical engineers will find much that is of value in the chapters dealing with electrical effects, aerosols, emulsions, foaming, and friction.

References to the literature are collected at the end of each chapter, and the indexing is of a high quality. The line drawings used as illustrations are clean and attractive, but there are a few half-tones that leave something to be desired in crispness. I do not know whether this is due to the method of reproduction or to the quality of the original photographs.

The price of the book, \$14, is certainly high; regrettably, this is characteristic of most monographs these days. Despite its price I strongly recommend it to those readers who are interested in surface chemistry.

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Miscellaneous Publications

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

Australia. Commonwealth Scientific and Industrial Research Organization. **Bulletin**, No. 283, "The ecosystem of the coastal lowlands ("Wallum") of southern Queensland," J. E. Coaldrake, 148 pp., map. **Research Review** (for the year ending 30 June 1960), 418 pp. CSIRO, Melbourne, 1961.

Belgium. Institut Royal Météorologique **Publications**, Series B, No. 33, "Un Hygromètre de grande sensibilité," S. de Backer. The Institute, Brussels, 1961. 10 pp.

Canada. Dominion Observatories, Victoria. **Publications of the Dominion Astrophysical Observatory**, vol. 11, No. 16, "Curve of growth of C_2 absorption bands applied to the problem of the C^{12}/C^{13}

abundance ratio," John L. Climenhaga, pp. 307-337, \$0.25; No. 17, "The light-ratio and secondary spectrum of the eclipsing binary zeta *Aurigae*," E. K. Lee and K. O. Wright, pp. 339-351; No. 18, "Some spectroscopic observations of the supergiants 67 *Ophiuchi*, 55 *Cygni* and x^2 *Orionis*," Anne B. Underhill, pp. 353-361. Department of Mines and Technical Surveys, Ottawa, Canada, 1960.

Canada, National Research Council and Medical Research Council. NRC No. 6390. **Report on University Support, 1960-61**. Natl. Research Council, Ottawa, Canada, 1961. 123 pp. \$0.50. Total research support by the councils at Canadian universities, \$10,477,031 (an increase of \$1.11 million over the previous year); direct support for science and engineering, \$7,169,402 (82 percent for research grants to approximately 800 university staff members and the remainder for more than 800 graduate scholarships and fellowships. Medical research awards totaled \$2,307,467 (300 research grants and support of 52 medical research fellows and 20 research associates). Indirect support (publication of scientific journals, contributions to scientific organizations and conferences, and administration of the program), \$1,000,162.

Department of Scientific and Industrial Research, National Chemical Laboratory. **Report, 1960**. Her Majesty's Stationery Office, London, 1961 (order from British Information Service, New York). 70 pp. \$0.85.

Geological Survey Bulletin, No. 1032-F, "Petrograph and origin of xenotime and monazite concentrations, Central City district, Colorado," E. J. Young and P. K. Sims, pp. 273-299, 1961, \$0.20. No. 1071-I, "Surficial geology of the Kingston quadrangle, Rhode Island," Clifford A. Kaye, pp. 341-396 + maps, 1960. No. 1081-D, "Stratigraphy and structure of the House Rock Valley area, Coconino County, Arizona," John D. Wells, pp. 117-157 + maps, 1960, \$0.75. No. 1081-E, "Geology of the Lloyd Quadrangle, Bearpaw Mountains, Blaine County, Montana," Robert George Schmidt, W. T. Pecora, Bruce Bryant, and W. G. Ernst, pp. 159-188 + maps, 1961. No. 1081-F, "Geology of the southern part of the Lemhi Range, Idaho," Clyde P. Ross, pp. 189-260 + maps, 1961. No. 1084-I, "A spectrochemical method for the semiquantitative analysis of rocks, minerals, and ores," A. T. Myers, R. G. Havens, and P. J. Dunton, pp. 207-229, 1961, \$0.15. No. 1089-B, "Geology of the Rogers Lake and Kramer quadrangles, California," T. W. Dibblee, Jr., pp. 73-139 + maps, 1960, \$1.25. No. 1098-B, "Geochemical prospecting abstracts, January 1955-June 1957," Ellen L. Markward, pp. 57-160, 1961, \$0.35. No. 1100, "Uranium and other metals in crude oils," C. A. Horr, A. T. Myers, P. J. Dunton, and Harold J. Hyden, pp. 1-99 + plates, 1961, \$1. No. 1102, "Stratigraphy and refractory clayrocks of the Dakota group along the northern front range, Colorado," Karl M. Waage, pp. 1-154 + maps, 1961. No. 1115, "Bibliography of North American geology, 1958," Ruth Reece King, pp. 1-592, 1961, \$2. No. 1116-D, "Geophysical abstracts 183,

October-December 1960," James W. Clarke, Dorothy B. Vitaliano, Virginia S. Neuschel, pp. 457-636, 1961, \$0.40. No. 1121-C, "Eolian deposits of the Matanuska Valley agricultural area, Alaska," Frank W. Trainer, pp. c-1 to c-34, 1961 (order from Supt. of Documents, GPO, Washington 25).

India, National Institute of Sciences, **Proceedings**, vol. 26, "Silver jubilee number." The Institute, New Delhi, 1961. 351 pp. Rs. 25

National Science Foundation. NSF 61-34. **Scientific Manpower, 1960**. Papers of the ninth conference. Supt. of Documents, GPO, Washington, D. C., 1961. 52 pp. \$0.40. Fifth report in an annual series. Contents: papers of the annual conference held during the annual meeting (1960) of the American Assoc. for the Adv. of Science and papers from the symposium on the Sociology and Psychology of Scientists.

New Zealand, Victoria University of Wellington. **Zoology Publication**, No. 27, "Deep-water eels from Cook Strait, New Zealand." P. H. J. Castle. The University, Wellington, 1961. 30 pp.

Pan American Sanitary Bureau. **Annual Report of the Director, 1960**. Official Documents No. 38. Pan American Health Organization, WHO, Washington, D.C., 1961. 155 pp.

Pan American Union, Organization of American States. **Studies and Monographs**, No. 1, "The teaching of economics in Latin America." OAS Washington, D.C., 1961. 111 pp. \$0.50. Report of a cooperative study made in 1960 by Howard S. Ellis (representing UNESCO), Benjamin Cornejo (ECLA), and Luis Escobar Cerda (OAS).

U.S. Office of Education. OE-50002-59, **Statistics of Land-Grant Colleges and Universities** (year ended 30 June 1959), George Lind, 150 pp., \$1; OE-84016, **Research in industrial education** (summaries of studies 1956-1959), Merle E. Strong, 148 pp., \$0.60; OE-14057, **Studies in Comparative Education**, "Education in Afghanistan," Abul H. K. Sassani, 55 pp., \$0.40; OE-34010, **Cooperative Research Monograph**, No. 6, "Teaching by machine," Lawrence M. Stolurow, 173 pp., \$0.65. Superintendent of Documents, GPO, Washington, D.C., 1961.

World Health Organization. **Public Health Papers**, No. 8, "The role of immunization in communicable diseases control," M. V. M. Zhdanov *et al.* (5 papers), 118 pp., \$1.25; No. 9, "Teaching of psychiatry and mental health," M. Bleuler *et al.* (12 papers), 186 pp., \$2; No. 10, "Control of soil-transmitted helminths," Paul C. Beaver, 44 pp., \$0.60. **Technical Report Series**, No. 220, "Evaluation of the carcinogenic hazards of food additives (fifth report, Joint FAO/WHO Expert Committee on Food Additives), 36 pp., \$0.60; No. 221, "Scientific meeting on the rehabilitation in leprosy," held at Vellore, Madras State, India, 21-29 November 1960, 37 pp., \$0.60; No. 223, "Programme development in the mental health field" (tenth report, Expert Committee on Mental Health), 55 pp., \$0.60. WHO, Geneva, Switzerland, 1961 (order from Columbia Univ. Press, New York).