Scientific Book Register

BOCHNER, S., and CHANDRASEKHARAN, K. *Fourier transforms.* Princeton, N. J.: Princeton Univ. Press; London: Geoffrey Cumberlege, Oxford Univ. Press, 1949. Pp. 219. $3.50.

BOIES, LAWRENCE R. *et al. Fundamentals of otolaryngology: a textbook of ear, nose and throat diseases.* Philadelphia-London: W. B. Saunders, 1949. Pp. xv + 443. (Illustrated.) $6.50.

DAVENPORT, HORACE W. *The abc of acid-base chemistry: the elements of physiological blood-gas chemistry for medical students and physicians.* (2nd ed.) Chicago: Univ. Chicago Press, 1949. Pp. 78. (Illustrated.) $2.00.

DAVIS, TENNEY L. (Ed.) *Chymia: annual studies in the history of chemistry.* (Vol. 2.) Philadelphia: Univ. Pennsylvania Press, 1949. Pp. x + 143. (Illustrated.) $4.00.

DE KRUIF, PAUL. *Life among the doctors.* New York: Harcourt, Brace, 1949. Pp. 470. $4.75.

FIELD, HENRY. *The anthropology of Iraq: the lower Euphrates-Tigris region.* (Part I, No. 2, Publ. 631). Chicago: Field Museum of Natural History, 1949. Pp. 227 + 426, plates 49 + 228. (Illustrated.) $5.00.

FLOSDORF, EARL W. *Freeze-drying: drying by sublimation.* New York (18): Reinhold, 1949. Pp. vii + 280. (Illustrated.) $5.00.

Gmelin's Hanndbuch der Anorganischen Chemie. (8th ed., System No. 10-B, Selenium.) Clausthal-Zellerfeld, Germany: Gmelin-Verlag, GMBH, 1949. (U. S. distributor: Dimitri R. Stein, 105 Pinehurst Avenue, New York (33), N. Y.) Pp. xxviii + 195. (Illustrated.) $16.25.

KLOEFFLER, ROYCE GERALD, and HORRELL, MAURICE WILSON. *Basic electronics.* New York: John Wiley; London: Chapman & Hall, 1949. Pp. xi + 435. (Illustrated.) $5.00.

MAYALL, R. NEWTON, and MAYALL, MARGARET L. *Skyshooting: hunting the stars with your camera.* New York: Ronald Press, 1949. Pp. xi + 174. (Illustrated.) $3.75.

MOORE, CHARLOTTE E. *Atomic energy levels: as derived from the analyses of optical spectra,* Vol. I, ^{1}H–^{23}V. (National Bureau of Standards Circular 467.) Washington 25, D. C.: Supt. of Documents, U. S. Govt. Prntng. Office, 1949. Pp. xliii + 309. $2.75.

ORDWAY, SAMUEL H., JR. *A conservation handbook.* New York (16): Conservation Foundation, 1949. Pp. 76. $1.00 postpaid.

PALMER, RALPH S. *Maine birds.* (Bull. Museum of Comparative Zoology, Harvard College, Vol. 102.) Cambridge 38, Mass.: Museum of Comparative Zoology, 1949. Pp. 656. $5.00.

RIDER, PAUL R. *First-year mathematics for colleges.* New York: Macmillan, 1949. Pp. xv + 714. (Illustrated.) $5.00.

NEWS and Notes

Alexander Spoehr, curator of oceanic ethnology, has left for a year's anthropological research for the Chicago Natural History Museum on Saipan and the Marianas. The expedition is sponsored by the National Research Council, in cooperation with the Navy Department. Dr. Spoehr will study the cultural change among the natives of the islands and conduct excavations in the Marianas to determine how these islands were originally peopled.

Thomas J. Parmley, professor of physics at the University of Utah and consultant at the Radiation Laboratory of the University of California, has joined the staff of the x-ray laboratory, Atomic and Molecular Physics Division, National Bureau of Standards. Dr. Parmley will investigate methods for measurement of the intensity and special distribution of pulsed x-rays.

Grant Taylor, assistant dean of the Duke University Medical School, has been named deputy director of the Atomic Bomb Casualty Commission in Japan. Dr. Taylor, who is associate professor of pediatrics and bacteriology at Duke, has been granted a two-year leave of absence for the special assignment.

Roger S. Warner, who recently resigned as director of engineering for the Atomic Energy Commission, has joined the staff of Arthur D. Little, Inc., research and engineering organization of Cambridge, Massachusetts.

Henry C. Meadow, coordinator of industrial research at the University of Rochester, has been appointed executive secretary to Harvard University's Committee on Research and Development for Medicine and Health. The committee is charged with the responsibility of coordinating the appeals for support of research and advanced training in all branches of science related to medicine and health.

Thorkild Jacobsen, director of the Oriental Institute and dean of the Division of Social Sciences at the University of Chicago, left for Baghdad October 27 with Mrs. Jacobsen, to join the University of Chicago-University of Pennsylvania archaeological expedition in Iraq. The group will continue excavating begun 50 years ago in the ruins of Nippur, 100 miles south of Baghdad.

Thomas J. Kirwin, assistant director of the James Buchanan Brady

Foundation for Urology, New York Hospital, has been appointed professor of urology at New York Medical College and director of the Department of Urology, Flower and Fifth Avenue Hospital and Metropolitan Hospital.

Visitors

H. Heller, professor of pharmacology of the University of Bristol, and **Hans Selye,** professor of physiology at the University of Montreal, were guest speakers at the University of Texas Medical Branch, Galveston, November 4 and 8 respectively. Professor Heller discussed the influence of renal factors on blood pressure, and Professor Selye, the alarm reaction.

Recent visitors at the National Bureau of Standards were: **J. J. W. den Haan,** chief engineer, Philips Research Laboratories, Eindhoven, Netherlands; **Adrien Jaquerod,** director, Swiss Laboratory of Horological Research, Neuchâtel, Switzerland; **P. W. Kim,** director of Technique and Supply, Kyongsong Spinning Company, Ltd., Seoul, Korea; **O. H. C. Messner,** consulting engineer, Gut Rosenberg, Zurich, Switzerland; **Ralph B. Watts,** head of Science Department, Australian Missionary College, Cooranbong, N.S.W., Australia; **P. Alexander,** manager, Research Department, Wolsey Ltd., Leicester, England; **A. T. S. Babb,** senior physical chemist, J. Lyons and Company, Ltd., London.

Grants and Awards

The 1950 medal of the Industrial Research Institute will be presented next April to Frank B. Jewett, former president of the National Academy of Sciences and for many years vice president of American Telephone and Telegraph Company. The medal is presented annually for "outstanding accomplishment in leadership or management of industrial research which contributes broadly to the development of industry or the public welfare."

Norten C. Melchior, assistant professor of biochemistry at the Stritch School of Medicine, Loyola University, Chicago, has been awarded a grant-in-aid from the Permanent Science Fund of the American Academy of Arts and Sciences for the study of metal-organic complex compounds.

The 1949 Nobel prize for medicine was awarded jointly to a Swiss and a Portuguese for their work with human and animal brains, the physics prize went to a Japanese-born professor at Columbia University, and the chemistry prize to a Canadian-born professor at the University of California.

Walter Rudolf Hess, 68, director of Zurich University's Physiological Institute, and *Antonio Caetano de Abreu Freire Egas Moniz,* 75, professor emeritus of neurology in the Faculty of Medicine of the University of Lisbon, shared the prize money for physiology and medicine. Dr. Hess, a specialist in the circulation of the blood and breathing, was recognized for his experiments on cats and dogs showing how certain parts of the brain control the organs of the body. Dr. Moniz received the award for his development of the surgical technique known as prefrontal lobotomy, for the treatment of schizophrenia and paranoia.

Hideki Yukawa, 42, visiting professor of theoretical physics at Columbia University since last September, won the physics prize "for his prediction of the existence of the meson (an elusive mass, heavier than the electron, which theoretically glues the atomic nucleus together), based upon his theory of nuclear forces." Dr. Yukawa was only 28 and a recent graduate at the University of Kyoto when he first predicted the existence of the meson.

William Francis Giauque, 54, professor of thermodynamics at the University of California, received the prize in chemistry "for his contribution to chemical thermodynamics, especially for his investigations of the properties of substances at extremely low temperatures." Through Dr. Giauque's methods, temperatures have been pushed within a few thousandths of a degree Kelvin of absolute zero.

The Nobel prizes, which have been awarded annually since 1901, will be presented at a ceremony in Stockholm on December 10. The peace prize will go to Lord Boyd Orr, as reported in *Science* October 28. No prize in literature will be awarded this year.

The Research Corporation has awarded a grant to Martin B. Williamson, assistant professor of biochemistry at the Stritch School of Medicine, Loyola University, Chicago, for the study of the chemical structure of proteins.

Colleges and Universities

The Saint Louis University Department of Biology has inaugurated a program of graduate research leading to advanced degrees in Arctic biology. In addition to laboratory research, the program will include field work in Alaska, under the direction of Charles G. Wilber, head of the department. A grant of $9,000 from the U. S. Air Force will assist the program.

University of Rochester scientists have developed a new motion picture camera lens made from artificial sapphire which has several advantages over optical glass lenses. Its extreme hardness makes it almost impossible to scratch, and its high refractive index, which changes very little with the color of the light, improves the sharpness and quality of the images produced.

Meetings and Elections

At their recent meeting at Woods Hole, Massachusetts, the **Atlantic Fisheries Biologists** elected William R. Martin and Frank D. McCracken of the Fisheries Research Board of Canada, St. Andrews, New Brunswick, as president and secretary-treasurer respectively.

The American Chemical Society will hold its 16th annual chemical engineering symposium in Columbus, Ohio, December 29 and 30 at the Ohio State University. The symposium, which will be under the direction of a committee headed by E. W. Thiele, of the Standard Oil

Company, will deal with every aspect of material transfer between a gas and liquid phase, or between two liquid phases. J. H. Rushton, of the Illinois Institute of Technology, is chairman of the technical program.

An International Colloquium on Adsorption and Heterogenous Kinetics, sponsored by the French National Center of Scientific Research, was held at the University of Lyon, France, September 12–17. The meeting was organized by Marcel Prettre, head of the Department of Industrial Chemistry of the University of Lyon, and was attended by about eighty scientists from various countries including the United States, Great Britain, Austria, Belgium, Holland, Australia, and France.

Visiting scientists who presented papers at the meeting were H. S. Taylor (Princeton) and P. H. Emmett (Mellon Institute); R. M. Barrer (Aberdeen), S. R. Craxford (British Fuels Research Laboratory), B. M. W. Trapnell (Royal Institute), and A. R. Ubbelohde (Belfast); J. Jungers and E. Mertens (Louvain); C. Herbo (Brussels); H. Forestier (Strasbourg); and E. Cremer (Innsbruck). French scientists participating included M. Prettre, R. Bernard, C. Courty, M. Perrin, Y. Eyraud, J. Sanlaville, P. Besson, S. Teichner, A. Troesch, P. Cornuault, E. Pernoux, and Y. Trambouze (Lyon); N. Bauer, M. Magat, M. Haissinsky, J. M. Dunoyer, M. Mathieu, M. Mering, J. Longuet-Escard, J. Escard, and Miss F. Fouinat (Paris); A. Michel (Lille); G. Valensi (Poitiers); and A. Guillemin, J. Vincent-Genod, J. Givaudon, E. Nagelstein, and R. Leygonie (French Petroleum Institute at Paris). In addition to those mentioned above, a number of visiting scientists from England, Holland, Belgium, and France took part in the discussions. In this group were C. Kemball, of Cambridge University, and the well-known catalytic chemist, L. Andrussow.

The meeting was opened by addresses of welcome by Prof. Douin, dean of the Faculty of Science at the university and by Prof. Prettre. At the same time M. Magat, who acted as official interpreter, was introduced to the colloquium. Prof. Magat, with his fluent command of French, English, and German and his well-founded and broad grasp of modern physical chemistry, contributed greatly to the success of the conference by his rapid and accurate translation of all discussions into French and English.

An interesting program of some forty papers that followed was divided into three main groups dealing with (1) the physical and chemical adsorption of gases by solids, (2) the texture and structure of catalyst surfaces as revealed by x-ray, adsorptive, electron microscopic, and magnetic techniques, and (3) the theoretical and experimental study of heterogenous kinetics of gas-solid and liquid-solid systems. According to present plans all of the contributed papers, together with the discussions, are to be published in a future issue of one of the French journals; accordingly, further details of the program will not be presented here.

The warm hospitality of the French hosts made the meeting especially pleasant for the visiting scientists. At the start of the meeting they were welcomed by a reception at the Hotel de Ville by a representative of M. Herriot, mayor of Lyon, and former prime minister of France. Throughout the week a series of luncheons and dinners gave all of us a chance to praise the excellent cuisine for which Lyon is noted and at the same time afforded an opportunity to discuss informally many matters of mutual interest.

PAUL H. EMMETT

An International Colloquium on Macromolecules was held September 1–5 in Amsterdam, Holland. The meeting, organized by Hermans, Koenigsberger, Overbeek, and Staverman had been very well prepared (all participants received a complete set of preprints about three weeks before its start) and gave an excellent cross section through recent progress in polymer kinetics and in the statistical treatment of macromolecules in solution. A number of papers on polycondensation, radical, cationic and anionic catalyzed addition polymerizations (by Champetier, Evans, Magat, and Melville) demonstrated that the kinetics of the formation of macromolecules under very widely varying conditions is beginning to be understood in a quantitative way. The trend now seems to be to apply the present results to arrive also at a quantitative control of copolymerization and to find ways and means to synthesize macromolecules of still higher molecular weights.

Particular interest was shown in several papers, by Eirich, Hermans, and Putzeys, on the statistical treatment of coiled macromolecules in solution and on the scattering of light by them. A series of contributions by Katchalsky, Künzle, and Overbeek was devoted to polyelectrolytes, with special emphasis on the significance of this branch of polymer science for the chemistry of proteins.

The level of all presentations was remarkably high; there was plenty of time for discussion and excellent use was made of it. On several fundamental points there was definite disagreement between the leading contributors, which resulted in animated discussions and arguments. The spirit and the stimulating effect of this colloquium were reminiscent of High Polymer Week at the Gordon Conference in Colby College. A volume containing all presentations and discussion remarks is scheduled to appear in about three or four months.

H. MARK

Conference on the Gene. A conference for examination of current developments and trends in studies of the gene was held at Shelter Island from May 30 to June 2 under the sponsorship of the National Academy of Sciences. The group of 20 participants included well-established geneticists and younger workers in the field. Free and informal discussion characterized the meetings, and provided an atmosphere conducive to critical examination of various aspects of the gene problem. The topics discussed included the mechanism of reverse mutation, the nature of allelism, the gene-enzyme relationship, the evidence for recom-

bination in bacteria and bacteriophages, the role of the cytoplasm in heredity, and the chemical nature of chromosomal materials. There was general agreement among participants that these meetings in a quiet and congenial atmosphere provided opportunities such as are rarely encountered in large, formal meetings, for critical evaluation and integration of genetic studies on a variety of organisms. In the opinion of the participants, the conference exerted a directional influence that will be reflected in future studies of gene structure and function.

BERWIND P. KAUFMAN

A symposium in plasma proteins was held at the University of Illinois College of Medicine September 23–24, under the sponsorship of the Robert Gould Research Foundation of Cincinnati. Eighteen papers were presented by investigators engaged in research in this field in one afternoon and two morning sessions. Junior associates of the speakers were present as guests of the Robert Gould Research Foundation. At the evening session a motion picture was shown by E. V. McCollum, and an address given by Hugues Gounelle of Paris, on some of the unexpected observations during years of underfeeding in France.

Although the subject of the symposium was plasma proteins, the consideration of the subject was purposely so broad that the program included papers dealing with fundamental aspects of protein metabolism which might not ordinarily be considered as falling within the implications of such a title. The program was built around the principal topics of formation, dietary relationships, fractionation of plasma proteins, immunologic relationship, relation to the liver, hypoproteinemia, tracer isotope studies in relation to the plasma proteins, endocrine relationships, and amino acid competitors. Sidney C. Madden spoke on plasma protein formation in disease states and Irving M. London on studies of rates of turnover of plasma protein in man. Fractionation and some of the interactions of the plasma protein were presented by J. L. Oncley, and a discussion of the binding properties of serum proteins for small molecules by S. H. Armstrong, Jr. Tracer and isotope studies included papers by David Shemin on aspects on the biosynthesis of amino acid and proteins, and by Paul C. Zamecnik and Ivan D. Frantz, Jr. on the use of C^{14}-labeled amino acid in the study of peptide bond synthesis. The effect of dietary proteins on synthesis and relations between diet protein stores and plasma protein were presented by Bacon F. Chow and James B. Allison. Hypoproteinemia, particularly in relation to protein starvation in man and its clinical relationships, was discussed by Robert Elman and experimental studies of protein deficiency and temperature in relation to the formation of edema by M. Hegsted. Studies of the fate of intravenously injected plasma albumin were described by Fuller Albright and its metabolism in normal and undernourished individuals by Charles S. Davidson. Clinical studies of the relation of proteins to nutritional edema were presented by Dr. Gounelle. Certain immunological aspects of the plasma proteins were presented by Paul R. Cannon and Michael Heidelberger, and the effect of adrenal cortex on plasma protein formation and utilization and the physiological properties of amino acid antagonists were given by Abraham White and Karl Dittman respectively. Discussion followed each session. The papers will be made available later as a monograph.

JOHN B. YOUMANS

A thriving scarlet ibis colony has been discovered in Venezuela by Paul A. Zahl, New York ornithologist, who, under the sponsorship of the National Geographic Society, has been searching Venezuela's inland river system for the bird's breeding ground (see *Science*, Sept. 16, p. 289). The rookery lies some 125 miles west of San Fernando and covers an area about half a mile long and a quarter-mile wide, on a nearly inaccessible flood plain. "From a distance," Dr. Zahl stated, "its foliage looks as though it were laden densely with blood-red fruit." He estimates the number of adult scarlet ibis at about 5,000.

Recently Received—

List of Publications, U. S. Forest Products Laboratory, January 1–June 30, 1949. Madison 5, Wisconsin.

Some Lower Huronian Stromatolites of Northern Michigan. Eugene S. Richardson, Jr. Fieldiana—Geology, Vol. 10, No. 8. Chicago Natural History Museum.

Medical Mission to Poland and Finland, July 1–August 27, 1948. Abridged report, submitted by Erwin Kohn. Unitarian Service Committee, Inc., 9 Park Street, Boston 8.

Committee on Public Health Relations: A Summary Report of Activities for the Year 1948. New York Academy of Medicine, 2 E. 103 Street, New York 29.

Wissenschaft und Weltbild. January 1949. (Issued quarterly.) Verlag Herold, Vienna.

Second Notice on AAAS Meeting

There are still plenty of New York hotel rooms for the week of the Association's meeting, December 26–31, but early indications of a shortage of single rooms were justified. Miss Sylvia T. Peltonen, Manager, Housing Bureau, New York Convention and Visitors Bureau, 500 Park Avenue, New York 22, who is in charge of room assignments, reported that she had made reservations for the following number of persons, as of November 7:

Statler	691
New Yorker	120
McAlpin	412
Governor Clinton	192
Martinique	195

The Martinique is now completely booked; the Statler has no more *single* rooms. Take advantage of double rooms and make your reservations in parties of two or more if possible. If all Penn Zone hotels should fill up there are excellent hotels nearby, with the same price range.