will make an address on "The Mode of Action of Gramicidin in Bacteria." Drs. Leonor Michaelis and F. Grannick, also of Rockefeller Institute, will read a paper on "Ferritin and Its Significance for Iron Metabolism."

Abraham White and T. F. Dougherty, of Yale University, will discuss "The Influence of Hormones on Serum Proteins." Research in "Physicochemical Characteristics of Albumins and Globulins of Human Plasma" will be reported by a Harvard group composed of Drs. L. E. Strong, J. L. Oncley, D. J. Mulford, W. L. Hughes, Jr., and E. J. Cohn. "Carbon Monoxide" will be the topic of a paper by F. J. W. Roughton, of Columbia University.

A report on "Clinical and Chemical Studies of the E Vitamins" will be presented by Dr. Philip L. Harris and K. Hickman, of Distillation Products, Inc. Dr. Roger J. Williams, of the University of Texas, will discuss "Studies on the Problem of the Significance of Folic Acid." Drs. T. F. Zucker, Lois Zucker and W. M. Sperry, of Columbia University, will speak on "Relative Growth" and on "The Distribution of Nitrogen, Fat and Water during the Life Cycle."

A second symposium to be held at the New York meeting will deal with sympathomimetic agents, compounds that affect the sympathetic nervous system of the body. It will be sponsored by the Division of Medicinal Chemistry, of which Dr. John H. Speer, of G. D. Searle and Company, Niles Center, Ill., is chairman. Papers will be read by Drs. Harry Gold, Cornell University Medical College, New York; Walter H. Hartung, University of Maryland; C. R. Scholz, Ciba Pharmaceutical Products, Inc., Summit, N. J.; M. L. Tainter, Winthrop Chemical Company, Rensselaer, N. Y.

SCIENTIFIC NOTES AND NEWS

THE eighth Edward Goodrich Acheson Medal and thousand dollar prize of the Electrochemical Society has been conferred on Dr. William Blum, chief of the Section of Electrochemistry of the U. S. Bureau of Standards, in recognition of his work for the standardization of electroplating methods and of plating formulas. The presentation will take place at the autumn convention of the society, which will open at Buffalo on October 13. Past recipients of the Acheson Award are: Edward G. Acheson, graphite and carborundum; Edwin F. Northrup, induction furnaces; Colin G. Fink, tungsten, chromium and tin; Frank J. Tone, silicon and silicon carbide; Frederick M. Becket, ferro-alloys; Francis C. Frary, aluminum; and Charles F. Burgess, electrolytic iron and dry batteries.

THE Borden Award, a gold medal and $1,000, for the most distinguished contribution to poultry science during the past year was presented at the recent annual meeting in Chicago of the Poultry Science Association to Dr. Fred R. Beaudette, poultry pathologist at the New Jersey Agricultural Experiment Station.

DR. BRUNO OETTEKING, curator of the department of physical anthropology of the Museum of the American Indian of the Heye Foundation, New York City, has been elected a corresponding member of the Sociedad Geografica of La Paz, Bolivia.

THE honorary degree of doctor of science was conferred at the commencement of the University of Maine on Dr. William H. Martin, dean of the College of Agriculture of Rutgers University.

THE University of St. Andrews has conferred the degree of LL.D. on Sir Robert Robinson, Waynflete professor of chemistry at the University of Oxford.

AT his request Dr. Ernst A. Bessey retired on July 1 from his work as dean of the Graduate School of the Michigan State College of Agriculture and Applied Science, a position that he has held since 1930. He is succeeded by Dr. R. C. Huston, dean of the Division of Applied Science. Dean L. C. Emmons, of the Liberal Arts Division, has been appointed dean of the School of Science and Arts, which has been formed by the merger of the Divisions of Applied Science and of Liberal Arts. Dr. Bessey continues as head of the department of botany.

DR. E. RAYMOND HALL, associate professor of vertebrate zoology and curator of mammals in the Museum of Vertebrate Zoology of the University of California at Berkeley, has a year's leave of absence to enable him to become professor of zoology, chairman of the department and director of the Museum of Natural History at the University of Kansas. He is taking the place of Professor H. H. Lane, who has reached the age of retirement for administrative appointees, but who will continue his work as professor of zoology.

DR. WILLIAM M. WHYBURN, chairman of the department of mathematics of the University of California at Los Angeles, has been elected president of the Texas Technological College. He has had leave of absence from the university for the past year to enable him to serve as a civilian officer with the operations analysis section of the Army Air Forces.

AT Indiana University Dr. Tracy Y. Thomas, since 1938 professor of mathematics at the University of California at Los Angeles, has been appointed chairman of the department of mathematics; Dr. Frank K. Edmondson has succeeded Professor W. A. Cogshall,

who recently retired as chairman of the department of astronomy. Vincent Nowlis, assistant professor of psychology at the University of Connecticut, has been appointed assistant professor of psychology. He will act as a research associate for studies on human sex behavior being carried out by Dr. A. C. Kinsey.

DR. JOHN S. LOCKWOOD, acting director of the Harrison department of surgical research of the School of Medicine of the University of Pennsylvania, has been appointed associate professor of surgery at the School of Medicine of Yale University.

DR. GRANVILLE A. BENNETT, of Tulane University School of Medicine, has been appointed professor of pathology and head of the department at the College of Medicine of the University of Illinois, Chicago.

DR. ALEXANDER THOM has been appointed to the professorship of engineering science at the University of Oxford.

DR. WILLIAM J. ROBBINS, director of the New York Botanical Garden, has been elected a member of the Board of Directors of the Boyce Thompson Institute at Yonkers, New York.

ELWOOD L. DEMMON, since 1928 director of the Southern Forest Experiment Station at New Orleans, has been named director of the Lake States Experiment Station at St. Paul, Minn. He succeeds Dr. Raphael Zon, director of the Lake States Station since 1923, who retires from active duty next month after forty-three years of continuous work with the Forest Service. Charles A. Connaughton, since June, 1938, director of the Rocky Mountain Station at Fort Collins, Colo., has been named director of the Southern Station.

J. KENNETH ABLEITER, principal soil scientist and chief analyst in soil uses and productivity of the Division of Soil Survey of the Bureau of Plant Industry, has been appointed chief inspector. In this position he is responsible for the system of soil classification, including the definition and nomenclature of the units of classification. He is succeeded as chief analyst by Dr. Carleton P. Barnes.

THOMAS P. FLEMING, medical librarian of the College of Physicians and Surgeons of Columbia University, has been appointed assistant director of the libraries of the university.

COLONEL GEORGE M. POWELL, M.C., director of the Special Planning Division, Operations Service, in the Office of the Surgeon General, who from 1939 to 1942 served as cardiologist and later became chief of the Medical Service at Gorgas Hospital, Ancon, Canal Zone, has been advanced from the grade of Lieutenant Colonel.

LIEUTENANT JOHN B. LUCKE, USNR, has leave of absence for military service from the University of Connecticut, where he is associate professor of geology and geography and head of the department. He has been assigned to the School of Photographic Interpretation, U. S. Naval Air Station, Anacostia, D. C., for further training until about October 1.

DR. LAWRENCE C. CURTIS, geneticist at the Connecticut Experiment Station at New Haven, has leave of absence for a year to serve on a food mission to North Africa with the Division of Relief and Rehabilitation of the Foreign Economic Administration to study the production of food crops in North Africa and the distribution of these crops to the Allies and to liberated countries.

DR. ALDO CASTELLANI, the well-known authority on tropical medicine, is one of twenty-five members of the faculty of the University of Rome who have been suspended. *The Times*, London, states that the majority of these men had either been ministers in the Fascist Government or had held high appointments in the corporations.

EROSION control on sandy soils and other soil conservation practices are being studied under auspices of the Government of Iceland by Páll Sveinsson, who is visiting in the United States. Previously he was associated for three years with the Soil Conservation Bureau under Gunnar Kristmundsson, who started the work some thirty years ago. Mr. Sveinsson plans to spend two or three years beginning this autumn at the University of Minnesota in studying agronomy, forestry and other subjects.

J. C. F. FRYER, who has been closely associated with the work of the British Agricultural Research Council since its establishment in 1931, has been released from his present work as director of the Laboratory of Plant Pathology of the Ministry of Agriculture and Fisheries to become secretary of the council. For the last three years he has been also acting as secretary of the Agricultural Improvement Council for England and Wales.

G. SHAW SCOTT has retired from the secretaryship of the British Institute of Metals, which he has held for thirty-six years. He is succeeded by K. Headlam-Morley, who will continue also as secretary of the Iron and Steel Institute.

THE National Metal Congress will meet in Cleveland during the week of October 16. W. H. Eisenman, national secretary of the American Society for Metals, is managing director. The congress is sponsored by the American Society for Metals in cooperation with the American Welding Society; the Iron and Steel and Institute of Metals divisions of the American Institute of Mining and Metallurgical Engineers; the

American Industrial Radium and X-Ray Society and the Society for Experimental Stress Analysis. Technical sessions will be held each morning, afternoon and evening. In addition to reports on research developments of the past year, there will be presented a series of practical panel-type production meetings each afternoon and evening, with the exception of Thursday evening when the annual dinner will be held.

THE first Institute of Dental Health Economics, sponsored by the School of Health of the University of Michigan, was held from June 26 to July 1 with an attendance of about a hundred. Twenty-six states were represented.

AN increase in quotas for admission to officer candidate courses leading to commissions in the Medical Administrative Corps of the Army, has been announced by the War Department. Quotas which until recently have been extremely limited have been revised to permit acceptance of 2,000 men within the next seven weeks for 17-week courses. The primary reason for the increase is the need for more officers qualified for administrative duties in the Army Medical Department to free members of the Medical Corps for professional duties. In recent months only the Medical Administration Corps Officer Candidate School at Camp Barkeley, Texas, has been accepting candidates. Under the new plan, the Officer Candidate School at Carlisle Barracks, Pennsylvania, has been reopened.

FIFTY-FIVE local governmental units in the Upper Peninsula of Michigan have availed themselves of the counseling service on post-war planning provided by the Michigan College of Mining and Technology. This service was first offered on July 1. Units which have received guidance include counties, all large cities in the Upper Peninsula, villages, townships, school districts and road commissions. The work falls under the Extension Division, and is conducted by Assistant Professor E. J. Townsend, a member of the staff both of the department of civil engineering and the department of economics. Professor Townsend has been designated by the Michigan State Planning Commission as its Upper Peninsula representative.

MR. AND MRS. MACO STEWART, of San Antonio and Galveston, recently offered their Galveston Island estate to the Medical Branch of the University of Texas for use as a convalescent home for children. The offer was accepted at the July meeting of the Board of Regents. The estate was named the Margie B. Stewart Convalescent Home for Children. Exceptional facilities are available for handling between thirty and fifty convalescent children, with outdoor fresh and salt water pools and special facilities for physical and occupational therapy. The project will comprise an important part of the Child Health Program of the Medical Branch as supported by the William Buchanan Foundation of Texarkana. The medical work of the new home will be under the direction of Dr. Arild E. Hansen, professor of pediatrics, while the surgical aspects and physical therapy will be under the direction of Dr. G. W. N. Eggers, professor of orthopedic surgery.

DISCUSSION

THE NATURE OF RH AGGLUTINATION REACTIONS[1]

THE question may be posed whether the special nature of the Rh reactions[2] is due to (1) some property of the Rh antigens, or (2) whether this can be traced to some special quality of the antibodies, or (3) whether peculiarities of both antigens and antibodies are responsible. Some observations by the authors have led us to the conclusion that the nature of the Rh antibodies is chiefly responsible for the peculiarities of the Rh reactions, though in addition special qualities of the agglutinogens may also play a rôle.

The anti-Rh sera most often used for diagnostic tests are human sera, obtained from mothers of erythroblastic babies.[3] The peculiarities of these sera are apparently due to the fact that they are *immune* sera, since they are produced in the mother in response to the stimulation of antigens of fetal origin, in contrast to the common blood grouping sera which are natural sera. This idea is supported by observations on human iso-immune sera against the properties A and B. (Such sera can be obtained from patients who have had transfusions of blood or plasma of an incompatible group, or from volunteer donors who have been given injections of small amounts of Witebsky's group substances A and B.) While most of these sera have approximately the same titer at room, body and refrigerator temperature, some have a much higher titer and react much more intensely and rapidly at body temperature than in the cold.[4] It is significant that these special human sera give less satisfactory reactions by the common slide technique at room

[1] From the Serological Laboratory of the Office of the Chief Medical Examiner of New York City. Aided by a grant from the United Hospital Fund of New York City.

[2] *Cf.* K. Landsteiner and A. S. Wiener, *Jour. Exp. Med.*, 74: 309, 1941.

[3] P. Levine, L. Burnham, E. M. Katzin and P. Vogel, *Am. Jour. Obstet. and Gynec.*, 42: 925, 1941.

[4] A. S. Wiener and R. B. Belkin, unpublished observations.