

troubles of the modern world are really due to the advance of science."

The evening program of the conference was opened by a dinner at the Baltimore Country Club, given by President Ames in honor of the donors, the chemistry faculty and the speakers of the occasion.

Concluding the program for the day, Dr. Irving Langmuir, who recently received the Nobel award in chemistry, gave an exposition of recent research in the field of "Two Dimensional Gases, Liquids and Solids." His topic was of especial interest to advanced chemists and physicists.—N. E. G.

SYMPOSIUM ON THE PHYSICS OF NUCLEI AND OF HIGH ENERGY RADIATIONS

THERE was held from May 11 to 26 at the Norman Bridge Laboratory of Physics of the California Institute of Technology at Pasadena, a symposium on "The Physics of Nuclei and of High Energy Radiations," with the following program:

- "Some Considerations on Cosmic Rays," Professor P. S. Epstein.
- "The Free Positive Electron," Dr. C. D. Anderson.
- "The Foundations of Atomic Mechanics," Professor Niels Bohr, of the University of Copenhagen.
- "A Review of the Experimental Evidence for Neutrons," Professor C. C. Lauritsen.
- "The Foundations of Atomic Mechanics," Professor Niels Bohr.
- "Artificial Disintegration of Nuclei," Professor E. O. Lawrence, of the University of California.
- "Recent Cosmic Ray Observations," Dr. H. V. Neher.
- "The Foundations of Atomic Mechanics," Professor Niels Bohr.
- "Spontaneous Nuclear Decomposition," Dr. R. M. Langer.
- "The Foundations of Atomic Mechanics," Professor Niels Bohr.
- "The Absorption and Scattering of High Energy Radiations," Professor J. R. Oppenheimer.

In addition to his participation in the symposium, Professor Bohr delivered a general lecture on the subject, entitled "'Explanation' in Natural Science." In this lecture he described the gradual change which the idea of mechanical explanation has undergone and the general outlook to which we are led regarding the problems in biology and psychology.

CONFERENCE ON THE DIFFUSION OF SCIENTIFIC KNOWLEDGE

THE summer meeting of the American Association for the Advancement of Science in Chicago will give opportunity for a unique gathering that deserves the

special attention of scientific men. This is a Science Service Conference on the Diffusion of Scientific Knowledge which will be held on Friday, June 23. It will partake of the character of an international conference in which distinguished scientists from other countries will participate. It is hardly necessary to comment on the importance of the widest and most effective possible dissemination of information concerning advances in the scientific field. A few facts regarding the origin and general plan of the symposium will be of interest.

Last January the executive committee of Science Service sought to determine the most appropriate way in which that institution could cooperate with the association and the Century of Progress in the Chicago meeting. Out of that discussion came a plan to hold a conference on the diffusion of scientific knowledge with contributions from representative scientists of the various countries participating in the meetings. The value of such a conference was so clear that the officers in charge of the Chicago program enthusiastically approved the idea. The executive committee of Science Service requested its chairman, Dr. W. H. Howell, to arrange the symposium and to secure speakers from among the foreign guests representing the Scandinavian countries, England, France, Germany and Italy. In this way it is hoped to present a picture of methods employed in various parts of the world to bring scientific research before the public, and to provide an opportunity for scientific men from different countries to express their views in regard to the purposes to be sought and the means to be used in the popularization of science.

The speakers at the conference will include: Professor Joseph Barcroft, professor of physiology, University of Cambridge; Professor Niels Bohr, director of the Institute for Theoretical Physics, Copenhagen University, Copenhagen; Professor Filippo Bottazzi, professor of physiology, University of Naples; Professor Jean Dufrénoy, director of the Station of Agricultural Pathology, Brive (Corrèze), France; Professor Robert A. Millikan, director of the Norman Bridge Laboratory of Physics, California Institute of Technology. Dr. J. McKeen Cattell, president of Science Service, will preside at the conference.

The Science Service conference will be held at a luncheon meeting at the Hotel Stevens, on Friday, June 23, at 12:45 P. M. An invitation is extended to all interested to attend. Tickets will be obtainable at the American Association for the Advancement of Science registration booth, upon arrival in Chicago.—W. H. H.

SCIENTIFIC NOTES AND NEWS

DR. FRANK SCHLESINGER, director of the Yale University Observatory, has been elected a correspondent

of the Paris Academy of Sciences in succession to the late Professor H. H. Turner, of Oxford, England.

DR. HARVEY CUSHING, who was until his retirement last year Moseley professor of surgery at Harvard University, was presented with the Bigelow Medal by the Boston Surgical Society on May 3, for his "contributions to the advancement of surgery." Previous recipients of the medal have been: 1921, Dr. William J. Mayo, Rochester, Minnesota; 1922, Dr. William W. Keen, Philadelphia; 1926, Dr. Rudolph Matas, New Orleans; 1928, Dr. Chevalier Jackson, Philadelphia; 1931, Professor George Grey Turner, Newcastle-upon-Tyne, England, and 1932, Dr. John M. T. Finney, Baltimore.

DR. CARROLL C. PRATT, of the department of psychology of Harvard University, was among those recently elected fellows of the American Academy of Arts and Sciences in Class IV, Section 1, which includes theology, philosophy and psychology.

At the recent Montreal meeting of the Electrochemical Society the Edward Goodrich Acheson Medal was awarded to Dr. Colin G. Fink, of Columbia University. Lawrence Addicks, chairman of the medal committee, in presenting his report stated that the award was made to Dr. Fink on account of his record of distinction as an original investigator, as an inventor and as a teacher of electrochemistry. The formal presentation of the medal will take place at the fall meeting of the society, Chicago, September 7 to 9, 1934.

Popular Astronomy notes that Sir Frank Dyson and Lady Dyson were recently guests of honor at a complimentary luncheon in recognition of the effective service Sir Frank had rendered during a period of twenty-three years as astronomer royal of England and of his attainments and achievements in astronomy. Speeches of congratulation were made by Professor F. J. M. Stratton and Dr. W. A. Parr, presidents, respectively, of the Royal Astronomical Society and the British Astronomical Association.

DR. ARTHUR E. MORGAN, president of Antioch College and president of the Dayton-Morgan Engineering Company, has been appointed by President Roosevelt to be chairman of the Tennessee Valley Power Authority, the supervisory body which is to direct the development of Muscle Shoals.

FRANK W. PECK, director of extension of the department of agriculture of the University of Minnesota since 1921, has been appointed to the staff of the federal farm board under its chairman, Henry Morgenthau, Jr. He has applied to the university regents for a year's leave of absence to take up this work.

WATSON DAVIS, since 1923 managing editor of Science Service, has been elected director. This position has been vacant since the death in 1929 of Dr. Edwin

E. Slosson, the first director. The following officers of Science Service were reelected at its recent annual meeting: Dr. J. McKeen Cattell, *president*; Dr. W. H. Howell, *vice-president* and *chairman of the executive committee*; Harry L. Smithton, *treasurer*; Watson Davis, *secretary*; Dr. C. G. Abbot and Marlen Pew, *members of the executive committee*.

DR. DEAN LEWIS, surgeon-in-chief of the Johns Hopkins Hospital, will be installed as president of the American Medical Association in Milwaukee on June 12.

THE new officers for 1933-1934 of the Electrochemical Society elected at the Montreal meeting are: Dr. John Johnston, of the U. S. Steel Corporation, *president*; H. S. Lukens (University of Pennsylvania), E. F. Cone (of *Iron Age*) and S. G. Blaylock (Trail, B. C.) *vice-presidents*; S. D. Kirkpatrick, editor, *Chemical and Metallurgical Engineering*, O. W. Storey, Chas. F. Burgess Laboratories, Inc., and T. F. Baily, Alliance, Ohio, *managers*; Dr. Robert M. Burns, of the Bell Telephone Laboratories, *treasurer*, and Dr. Colin G. Fink, of Columbia University, *secretary*. The Weston Fellowship (\$1,000) for 1933-1934 was awarded to Mr. R. D. Blue, a graduate of the University of Indiana. The Electrochemical Society's annual prize to young authors went to Frank W. Godsey, Jr., of New Haven, for his paper on "Electrolytic Condensers."

THADDEUS MERRIMAN, chief engineer of the New York City Board of Water Supply, has been elected president of the Metropolitan Section of the American Society of Civil Engineers. David B. Steinman, consulting engineer, was elected vice-president, and Jacob S. Langthorn was chosen treasurer. Arthur G. Hayden, William W. Brush and E. M. Van Norden were elected directors.

NEWLY elected officers of the University of Cincinnati Chapter of Sigma Xi are: *President*, Dr. Shiro Tashiro, professor of biochemistry in the Medical College; *Vice-president*, Dr. Robert A. Kehoe, director of the Kettering Laboratory; *Secretary-treasurer*, Dr. Saul B. Arenson, associate professor of inorganic chemistry, College of Engineering and Commerce; *New Members of the Nominating Committee*, Dr. Chas. N. Moore, department of mathematics, and Dr. D. A. Wells, department of physics.

MR. CHARLES AUGUSTUS CARLOW was elected president of the Mining Institute of Scotland at the recent annual meeting.

DR. GEORGE F. BUCHAN has been elected chairman of the council of the Royal Sanitary Institute for the session 1933-34, in succession to Dr. Charles Porter, whose term of office has expired.

A GRANT of \$500 has been made from the Marsh Fund of the National Academy of Sciences, under which M. K. Elias, of the Kansas Geological Survey, will carry on field studies of fossils of western Kansas, Nebraska and South Dakota. Dr. Elias will begin the field work in Cheyenne, Rawlins, Rooks and Graham Counties.

MISS ANNE HEYMAN was awarded the first prize of \$300 for her paper, "The Bacteriology of Goiter," by the American Association for the Study of Goiter at its annual meeting, which was held in Memphis, Tennessee, from May 15 to 17. The prize is awarded annually for the best paper based on original research on any phase of goiter. The present investigation was carried out in the Hygienic Laboratory at the University of Michigan under the supervision of Dr. Malcolm H. Soule.

THE American Medical Association has made a grant to the Research Department of the Barnard Free Skin and Cancer Hospital of St. Louis, to support studies, under the direction of Dr. M. G. Seelig, of the carcinogenic action of scarlet red and dibenzanthracene 1:2:5:6.

THE Daniel-Pidgeon fund for 1933 of the Geological Society of London has been awarded to Mr. J. D. Solomon, for work on the correlation of the Pleistocene deposits of southeastern England with those of the Continent.

THE Carnegie Corporation has recently voted \$30,000 to the Research Grant Board of the Union of South Africa to support specific scientific research projects which may be selected by the board. This grant from the corporation's special fund (applicable elsewhere than in the United States) supplements a previous grant of \$50,000 voted in 1927. The membership of the board is as follows: Professor Robert B. Young, *chairman*; Sir Spencer Lister; Professor L. Fouche; Dr. J. McCrae, and Dr. P. J. du Toit. Among the projects already carried out are: Lepidoptera of South Africa, by Dr. A. J. T. Janse; Engraved Stones of Bechuanaland and Griqualand West, by Miss M. Wilman; Music and Musical Practices of the Native Peoples of South Africa, by Professor P. R. Kirby.

DR. CURT STERN, of the Kaiser Wilhelm Institut, who has been in this country since 1932, is working temporarily at the laboratory of the Carnegie Institution at Cold Spring Harbor, New York.

DR. PEDRO ARA, formerly director of the Anatomical Institute in Cordoba, Argentina, now of Madrid, Spain, is visiting the United States.

DR. PIERRE LECOMTE DU NOÛY, chief of biophysical chemistry at the Pasteur Institute, Paris, sailed for the United States on May 18. He will be in charge of

the Pasteur Institute exhibit at the Chicago exposition.

DR. C. G. ROSSBY, professor of meteorology at the Massachusetts Institute of Technology, will return from Europe early in June, after an absence of eight months, during which he studied the latest advances in modern European meteorological methods.

DR. WALTER STRAUB, professor of pharmacology at the University of Munich, was a recent guest of Dr. Harvey B. Haag, professor of pharmacology at the Medical College of Virginia, Richmond. Dr. Haag worked in Dr. Straub's laboratory several years ago in Munich.

DR. JOHN H. VAN VLECK, professor of theoretical physics at the University of Wisconsin, will give this summer a course of lectures on "The Recent Developments in the Theory of Magnetism" at the University of Michigan.

DR. FREDERICK L. HISAW, professor of zoology at the University of Wisconsin, was the guest speaker at the final meeting of the year of the Iowa Section of the Society for Experimental Biology and Medicine held at the State University of Iowa on May 12. Dr. Hisaw addressed the society on "Hormones Influencing the Primate Endometrium."

MARQUETTE UNIVERSITY has announced the appointment of Dr. Edward J. v. K. Menge, director of the department of zoology, to be international guest lecturer to the national universities of Poland for the summer of 1933. He will deliver a series of six lectures interpreting the science and philosophy of America in its relations to the science and philosophy of Slavic and Latin countries. In 1927 Dr. Menge was international guest lecturer to the national universities and learned societies of Brazil, Uruguay, Argentina and Chile.

By invitation of the senate and academic council of the University of London, Professor William King Gregory will give a series of lectures on the evolution of man at University College at the end of May. Professor Gregory sailed for England on May nineteenth and will return about the middle of June.

DR. J. BJERKNES, director of the Geophysical Institute, Bergen, Norway, who is the guest of the Century of Progress Exposition and of the American Association for the Advancement of Science for the Chicago meeting, will give a series of lectures on the stratosphere at the Massachusetts Institute of Technology early in June. Dr. Bjerknes is also expected to lecture at the University of Toronto.

PROFESSOR HENRY FAIRFIELD OSBORN sailed on May 19 for a brief visit abroad. Arriving in London on May 25 he expects to read before the Royal

Society of London a paper entitled "Principles of Biomechanical Evolution, Observed in Fossil Mammalia"; on May 29, at a regular weekly session of the Académie des Sciences of the Institut de France, the same communication will be made in French with the title "Aristogénèse, le Nouveau Principe Inductif d'Evolution Biomécanique." These two addresses are the tenth and eleventh in a series on the Origin of Species; the ninth, "Aristogenesis, the Observed Order of Biomechanical Evolution," was presented to the National Academy of Sciences on April 25. Professor Osborn's Aristogenesis conclusions are the results of his scientific observations, chiefly on titanotheres and proboscideans, for the past forty-five years. Returning to England on May 30, Professor Osborn will spend the four days before his departure on June 3 in reexamining the famous Piltdown specimens in the British Museum and comparing with the originals the drawings that were prepared for him by Miss Barbara Hopkins; he hopes also to return with Mr. J. Reid Moir to the Piltdown and Foxhall localities, to make further study of the geology of these regions, in preparation for his forthcoming revision of "Men of the Old Stone Age."

THE one hundred and eighty-sixth regular meeting of the American Physical Society will be held at Chicago from June 19 to 24, as a joint meeting with Section B of the American Association for the Advancement of Science. On Monday morning, June 19, there will be sessions for the reading of contributed ten-minute papers. The remainder of the week will be devoted to symposia, public lectures and other forms of entertainment connected with the Century of Progress Exposition. The titles of the symposia are: "Applications of Quantum Mechanics in Chemistry"; "Isotopes"; "Age of the Earth"; "Applications of Spectroscopy in Astronomy"; "Nuclear Disintegration." Among distinguished foreign guests will be: F. W. Aston, Niels Bohr, J. Bjerknes, J. D. Cockcroft, Madame Curie, E. Fermi and A. Sommerfeld. They will participate in the symposia together with members of the American Physical Society.

THE sixth power show at Chicago previously scheduled for the Coliseum will be transferred to the Exhibition Hall of the Stevens Hotel, the center of "Engineering Week" activities of the Century of Progress. This change in location will permit the engineering profession visiting Chicago to visit the show while attending their meetings, and brings together the "Engineers' Day" banquet and the exhibit in the same building. Approval of participating in "Engineering Week" of the World's Fair has been given already by 19 engineering associations. Others will also participate. The organizations cooperating are as follows: American Association for the Advancement of Sci-

ence, American Association of Engineers, American Ceramics Society, American Foundrymen's Association, American Institute of Electrical Engineers, American Institute of Mining and Metallurgical Engineers, American Society of Civil Engineers, American Society of Mechanical Engineers, American Society of Municipal Engineers, American Society for Testing Materials, American Society of Agricultural Engineers, National Council of State Boards of Engineering Examiners, Society for the Promotion of Engineering Education, Society of Industrial Engineers, Institute of Radio Engineers, Western Society of Engineers, American Society of Refrigerating Engineers, American Welding Society, National Industrial Advertisers Association, National District Heating Association.

At the annual meeting of the District of Columbia Chapter, Society of the Sigma Xi, held on May 9, Lyman James Briggs, acting director of the National Bureau of Standards; George Walter McCoy, director of the National Institute of Health, and Matthew William Stirling, chief of the Bureau of American Ethnology, Smithsonian Institution, were presented as members-elect, and an illustrated address was given by Dr. Paul Bartsch, curator of the division of mollusks, Smithsonian Institution, who presented some of the results of his recent exploration of marine life in the deeps near the West Indies. The president-elect for the coming biennium is Dr. Alexander Wetmore, assistant secretary of the Smithsonian Institution.

THREE new buildings have been erected at Bear Mountain for the Trailside Museum of the American Museum of Natural History, which opened for the season on May 1. The buildings were erected by the Commissioners of Palisades Interstate Park under direction of William A. Welch, general manager and chief engineer, and John Tamsen, park superintendent. The wooden craft-house and garage were replaced by buildings of native stone, and a new Geology Trailside Museum, also of native rounded boulders, was built. The new museum will house exhibits of minerals and rocks of the region, relief models, reference collections and a library. New stone steps and bridges have been built along the trail at several points, a new approach has been made to Geology Point overlooking the Hudson River, and more parking space and other improvements have been added.

WORD has been received that the preparation of the English manuscript of the International Rules of Botanical Nomenclature adopted at Cambridge in 1930 has been completed. This draft was sent to Germany and France about February 1 for translation. It is expected that these rules will be published during 1933.