

machines, reaction and impulse turbines, pumps and hydraulic apparatus are to be placed in these rooms. The long testing flume will be used for current meters and models. The second floor contains a laboratory classroom for electrical instrument work, a dark room for illumination and oscillograph work, small rooms for mechanical work and a large room for research.

### THE AMERICAN PHYSICAL SOCIETY AND THE UNIVERSITY OF MINNESOTA

THE autumn meeting of the American Physical Society will be held at the University of Minnesota on November 30 and December 1. The new laboratory of physics of the university will be dedicated on the evening of the thirtieth. The program is as follows:

#### NOVEMBER 30

10:00-12:00 M.

Reading of Papers, Physics Auditorium.

12:00-1:30 P. M.

Luncheon, Ballroom, Minnesota Union.

1:30-5:00 P. M.

Dedicatory Symposium, Physics Auditorium.

PROFESSOR HERMANN WEYL (University of Zürich):  
Address: "Laws of Conservation and Rules of Intensity in Quantum Mechanics."

PROFESSOR K. T. COMPTON (Princeton University):  
"Scattering of Electrons."

PROFESSOR E. U. CONDON (Princeton University):  
"Quantum Theory of Aperiodic Effects."

DR. F. L. MOHLER (Bureau of Standards): "Photo-ionization and Recombination."

DR. IRVING LANGMUIR (General Electric Co.): "Motions of Positive Ions in Ionized Gases."

6:00-8:00 P. M.

Complimentary Dinner, Ballroom, Minnesota Union,  
DEAN G. S. FORD, presiding.

Welcome to Guests—PRESIDENT L. D. COFFMAN.

Response—DR. KARL T. COMPTON.

Addresses—DR. W. F. G. SWANN and PROFESSOR S. C. LIND.

8:15 P. M.

Dedicatory Exercises, Physics Auditorium, PRESIDENT  
L. D. COFFMAN, presiding.

Presentation of building on behalf of Regents—HON.  
FRED B. SNYDER.

Acceptance—DEAN J. B. JOHNSTON and PROFESSOR H.  
A. ERIKSON.

Dedicatory Address—PROFESSOR JOHN ZELENY: "The  
Place of Physics in the Modern World."

#### DECEMBER 1

10:00-12:00 M.

Reading of Papers, Physics Auditorium.

12:00-2:30 P. M.

Drive. St. Anthony boulevard, Memorial Drive, Glenwood, Lake of the Isles to Minnekada Club for

luncheon. Continue drive Calhoun, Harriet, Minnehaha, River Road to Laboratory.

2:30 P. M.

Reading of Papers, Physics Auditorium.

### SCIENTIFIC NOTES AND NEWS

THOMAS CHROWDER CHAMBERLIN, emeritus professor of geology in the University of Chicago, died on November 15 at the age of eighty-five years.

WILLIAM NORTH RICE, emeritus professor of geology in Wesleyan University, died on November 13, at the age of eighty-three years.

It is announced from Stockholm that Nobel prizes in chemistry for 1927 and 1928 have been awarded to Dr. Heinrich Wieland, professor in the University of Munich, and Dr. Adolf Windaus, professor in the University of Göttingen. Both investigators have been engaged in the study of vitamins and have done distinguished work in this and in other departments of physiology and chemistry. M. Henri Bergson, French author and philosopher, is said to have been awarded the prize in literature for 1927, and Mme. Sigrid Undset, the Norwegian authoress, for 1928.

THE following awards have been made by the president and the council of the Royal Society: Royal Medals to Professor A. S. Eddington, for his contributions to astrophysics, and to Professor R. Broom, for discoveries which have shed new light on problems of the origin of mammals; the Copley Medal to Sir Charles Parsons, for his contributions to engineering science; the Rumford Medal to Professor F. Paschen, for his contributions to the knowledge of spectra; the Davy Medal to Professor F. G. Donnan, for his contributions to physical chemistry, particularly for his theory of membrane equilibrium; the Darwin Medal to Dr. L. Cockayne, for his contributions to ecological botany; the Sylvester Medal to Professor W. H. Young, for his contributions to the theory of functions of a real variable; the Hughes Medal to M. le Duc de Broglie, for his work on X-ray spectra.

DR. HERMAN SCHNEIDER, professor of civil engineering, dean of the college of engineering, and now acting president of the University of Cincinnati, has been made an honorary member of the Cincinnati Academy of Medicine.

DR. MARSTON TAYLOR BOGERT, professor of organic chemistry at Columbia University, was the guest of honor at the dinner of the Engineering Foundation, New York, on October 18. Professor Bogert has re-

cently accepted the following appointments: associate editor of the *Journal of the American Chemical Society* for a period of five years; member of division of chemistry and chemical technology of the National Research Council for a period of three years; collaborator, bureau of chemistry and soils, U. S. Department of Agriculture, for one year and member of the board of scientific directors of the New York Botanical Garden.

WILLIAM E. WEISS, of Wheeling, West Virginia, vice-president and general manager of Drugs, Inc., and general manager of the Sterling Products Company, Inc., was the guest of honor at a dinner in New York City on November 13, when he received the degree of doctor of philosophy, *honoris causa*, which was conferred upon him last June by the University of Cologne. The parchment bearing the seal of the university was formally presented by three directors of the university, Dr. Otto Doermer, Dr. Rudolf Mann and Dr. O. Von Hoeffer.

DR. RAYMOND A. DART, professor of anatomy in the University of the Witwatersrand, Johannesburg, has been elected a corresponding member of the Italian Institute of Human Paleontology, Florence.

ACCORDING to information received by the New York *Evening Post*, in the election for the presidency of Austria neither the government party nor any coalition would result in the necessary two thirds vote for any party politician. Hence a movement is under way to choose a president from among scientific men. Three names mentioned as possibilities are those of Professor Richard Wettstein, botanist of the University of Vienna; Professor Clemens Pirquet, children's specialist and chief of the Vienna Children's Clinic, and Professor Anton Eiselsberg, professor of surgery in the University of Vienna.

WILBER STOUT has been appointed state geologist of Ohio, succeeding the late John A. Bownocker. Mr. Stout has been a member of the Geological Survey for seventeen years and is the author of a number of the bulletins of the survey dealing with the stratigraphy and economic products of the Pennsylvanian and Permian systems of eastern Ohio.

DR. EUGENE C. AUCHTER, professor of horticulture in the University of Maryland and chief horticulturist of the Maryland Experiment Station and the Maryland extension service, has been appointed as a principal horticulturist in the Bureau of Plant Industry to take charge of the newly created office of horticultural crops and diseases. Dr. Victor R. Boswell, associate professor of horticulture in the University of Maryland, has been appointed as a senior horti-

culturist in the bureau, to have charge of the investigations in vegetable production in the new office of horticultural crops and diseases.

THE Chemical Catalog Company has announced the election of Francis M. Turner, Jr., as president. Prior to becoming editor-in-chief for the Chemical Catalog Company Mr. Turner was in the service of the American Vanadium and other corporations, as well as Canadian government commissions. He has been associated with the Chemical Catalog Company since its founding, and became vice-president in 1925.

J. C. MUNCH, formerly in charge of the federal pharmacological laboratory of the Food, Drug and Insecticide Administration, has succeeded Paul S. Pitenger as director of the Pharmacological Research Laboratories of Sharp and Dohme, Baltimore, Maryland.

JOHN M. DANNEKER, formerly instructor in chemistry at Tulane University, was recently appointed city chemist by the Commission of the City of New Orleans.

DR. P. J. KELLY, surgeon-general of British Guiana, has been nominated a member of the legislative council of British Guiana and a member of the executive council of the colony.

DR. W. V. KING, of the Bureau of Entomology, who has been engaged in mosquito work at Mound, Louisiana, has an appointment from the International Health Board to visit the Philippine Islands for the purpose of making a special study of mosquitoes in the islands. He expects to spend several months in the islands and will bring his material to the museum for final study in conjunction with Dr. Harrison G. Dyar.

A MEETING of the committee on electrical insulation of the National Research Council was held at the Johns Hopkins University on November 15, 16 and 17. The sub-committee on physics includes the following members: Professor Vladimir Karapetoff, *chairman*, Cornell University; Mr. Ernest G. Linder, *secretary*, Rockefeller Hall, Ithaca, New York; A. A. Bless, University of Florida; Professor A. B. Cushman, University of Illinois; Professor A. H. Compton, University of Chicago; Professor K. T. Compton, Princeton University; Dr. H. L. Curtis, Bureau of Standards; Professor Wheeler P. Davey, Pennsylvania State College; Professor O. S. Duffendack, University of Michigan; Dr. C. F. Hill, research department, Westinghouse Electric and Manufacturing Company; Professor S. C. Lind, University of Minnesota; Professor L. B. Loeb, University of California; Dr. G. M. J. Mackay, research laboratory, General Electric Company; Dr. F. B. Silsbee, Bureau of Standards; Professor Harry D. Smythe, Princeton

University; Dr. T. S. Taylor, Bakelite Corporation, Professor J. B. Whitehead, the Johns Hopkins University.

DR. EDWIN R. EMBREE, president of the Julius Rosenwald Fund, announces that it is planned to extend the work of the fund, heretofore chiefly concerned with building negro rural schools, to include support of medical services to people of moderate means. Michael M. Davis, Ph.D., has been appointed to the executive staff of the fund as director for medical services. He will direct the program which the fund is planning to undertake in cooperation with the medical profession to improve the organized facilities for medical service to the average man. Special attention will be given to pay clinics. William B. Harrell, now assistant auditor of the University of Chicago, has been appointed secretary and comptroller. Clark Foreman, a graduate of the University of Georgia, who is now with the Phelps-Stokes Fund of New York, has been appointed associate field agent for southern schools and colleges. Dr. Franklin C. McLean, chief of the medical clinics of the University of Chicago, has been elected a trustee.

THE non-resident lecturer in chemistry at Cornell University under the George Fisher Baker Foundation, for the second term of the academic year 1928-1929, will be Professor F. M. Jaeger, of the University of Groningen, Holland. In his lectures Professor Jaeger will discuss two topics, "Symmetry and Optical Activity of Atomic Configurations" and "Methods, Results, and Problems in High Temperature Precision Measurements." His lectures will begin on February 14.

PROFESSOR W. A. NOYES, of the University of Illinois, recently made a lecture tour during which he spoke on "Valence" before sections of the American Chemical Society at St. Louis, Manhattan, Kansas, and Kansas City.

ON November 13, Dr. W. F. G. Swann, director of the Bartol Foundation of the Franklin Institute, addressed the Swarthmore College Chapter of the Society of Sigma Xi on "The Work of the Bartol Research Foundation."

THE annual Gross lecture of the Pathological Society of Philadelphia was delivered November 8 by Dr. Arnold R. Rich, associate professor of pathology, the Johns Hopkins University School of Medicine, Baltimore, on "The Rôle of Allergy in Tuberculosis."

DR. HRDLÍČKA delivered a lecture on November 5 on "The Where, When and Why of Human Evolu-

tion" before the Section of Geology and Mineralogy of the New York Academy of Sciences.

THE Lloyd Roberts lecture on Faraday's diary will be delivered by Sir William Bragg at the Royal Society of Medicine, London, on November 29.

DR. F. G. BANTING, of the University of Toronto, gave the Cameron lecture at the University of Edinburgh on October 30, giving a historical account of the researches that led to the discovery of insulin.

THE first Liversidge lecture before the Chemical Society of London, entitled "Physical Chemistry in the Service of Biology," will be delivered by Professor F. G. Donnan on November 29.

DURING the week beginning November 19 a series of lectures was given at Vassar College under the auspices of the biological departments, botany, physiology and zoology. This is in accordance with a custom at Vassar to devote two or three times a year one week to lectures under the auspices of two or more allied departments. The first such series was given in the fall of 1926 in connection with the opening of the Sanders Laboratory of Physics. The speakers and subjects were as follows: November 19, Dr. W. Mansfield Clark, the Johns Hopkins University, "Life without Oxygen"; November 21, Dr. Wm. Crocker, Boyce Thompson Institute of Plant Research, "Research with Plants"; November 21, Dr. George H. Parker, Harvard University, "Organization of the Nervous System"; November 22, Dr. John M. Coulter, Boyce Thompson Institute of Plant Research, "The Present Status of Evolution"; November 23, Dr. Robert Chambers, New York University, "Our Knowledge of Protoplasm as Obtained by the Microdissection Method"; November 23, Dr. Abby H. Turner, Mt. Holyoke College, "Harvey and the Circulation after Three Hundred Years."

ON November 19, 20, 21, 22 and 23, Professor H. B. Williams, director of the department of physiology of the College of Physicians and Surgeons, Columbia University, delivered the third annual Priestley Lectures at Pennsylvania State College. The topic of his course of lectures was "Method in Scientific Investigations." The Priestley Lectures deal each year with the borderline between physical chemistry and some other branch of science. The first year's lectures dealt with the borderline between physical chemistry and bio-colloids and were given by V. Cofman, of the Experimental Station of the E. I. du Pont de Nemours and Company. The second year's lectures on the borderline between physical chemistry and

metallography were given by Dr. S. L. Hoyt, of the Research Laboratory of the General Electric Company.

DR. ALEXANDER ZIWET, professor of mathematics at the University of Michigan, died on November 18, at the age of seventy-five years.

SIR HUGH KERR ANDERSON, F.R.S., master of Gonville and Caius College, Cambridge, has died at the age of sixty-three years. Sir Hugh was elected a fellow of the Royal Society in 1907 for his researches on the physiology of the nervous system.

THE death is announced of Professor Luigi Sabatani, of the chair of pharmacology in the University of Padua.

R. A. BERRY, professor of agricultural chemistry at the West of Scotland Agricultural College, Glasgow, died on October 12, aged fifty-two years.

CORNELL UNIVERSITY has been chosen for the meeting of the sixth International Congress of Genetics in August, 1932. At the last meeting of the congress, held in Berlin in 1927, it was voted to hold the sixth meeting in the United States. Dr. C. B. Davenport, in charge of the Carnegie Station for Experimental Evolution, and Dr. T. H. Morgan, of the California Institute of Technology, were appointed a committee to determine the place of meeting. This will be the third international scientific convention to be held at Cornell in recent years. The other two were the International Congress of Plant Sciences in 1926 and the International Congress of Entomology, which was held during the past summer.

THE Iowa Academy of Science will hold its annual meeting in April at Parsons College, Fairfield, Iowa.

A BALNEOLOGICAL Congress will be held in Berlin from January 25 to 27, this being the fiftieth year since the foundation of the German Balneological Society. Details may be obtained from the general secretary of the congress, Fraunhoferstrasse 16, Charlottenburg, Germany.

THE International Conference on Economic Statistics of the League of Nations will open in Geneva on November 26. The American representatives include: Dr. E. Dana Durand, chief of the division of statistical research, Department of Commerce, as delegate; Asher Hobson, of the permanent committee of the International Institute of Agriculture, and James F. Dewhurst, chief of the statistical division of the Federal Reserve Bank of Philadelphia.

THE *Journal* of the American Medical Association reports that, under the patronage of the king, with

Mr. Chamberlain, minister of health, as president, a public health congress and exhibition will be held in London in November. Addresses will be given by Sir George Newman, chief medical officer of the ministry of health, on the purpose of the public health services; by Sir Walter Fletcher, secretary of the Medical Research Council; by Mr. Wilfred Buckley, a member of the milk advisory board, on the production and distribution of wholesome milk, and by Dr. W. M. Willoughby, health officer of the city of London, on food protection from the national and domestic standpoints. Water supply and sewerage, the construction and equipment of hospitals and town cleansing are other subjects. The congress will last for a week.

THE president of the Board of Education of Great Britain has appointed a committee to advise as to the scope and methods of the board's inquiry into technical education for the engineering industry, and to review the material furnished to the board in the course of the investigation. Sir Dugald Clerk is chairman of the committee and Mr. H. B. Wallis will act as secretary. All communications should be addressed to him at the office of the Board of Education, King Charles-street, Whitehall, London, S. W. 1.

THE Office International d'Hygiène Publique, Paris, has entered into an agreement with the Health Committee of the League of Nations to avoid overlapping in work; this and several similar agreements have resulted in the establishment of a world-wide system of immediate intelligence regarding the prevalence of cholera, plague, yellow fever, small-pox and typhus. Consideration has been given to proposals for unifying quarantine flags and signals, and for establishing an annual international record of the sanitary equipment of seaports, and like matters.

DR. L. C. GRAY, in charge of the division of land economics, Bureau of Agricultural Economics, returned from Rome on November 2, where he and Asher Hobson served as delegates of the United States in the general assembly of the International Institute of Agriculture. Mr. Hobson is permanent delegate of the United States to the institute. Dr. Gray reports that the assembly passed practically all the resolutions in which the American delegation had special interest. Resolutions were passed providing for changes in the statutes, and in the policy of the permanent committee looking toward a larger measure of international control and a greater degree of centralization of administration, which, it is believed, will result in greater efficiency in the operation of the institute. Resolutions were passed directing the administration of the institute to put greater emphasis on its work

of collecting and transmitting statistics on crops and livestock and livestock products by cable, and providing for promoting the use of standard methods in collecting statistics in the various countries, and for the development of standard index numbers of prices, production, factors of expenses and net income.

A PRELIMINARY statement by the British Ministry of Agriculture relating to the World Poultry Congress in 1930 has been issued. The Crystal Palace has been made headquarters of the congress. The Ministers of Agriculture for England and Wales and Northern Ireland, and the Secretary of State for Scotland will be presidents of the congress; Mr. F. C. Elford (Canada), president of the International Association of Poultry Instructors and Investigators, will be first vice-president, with Lord Dewar and Dr. Edward Brown, vice-presidents. Invitations have been sent to the National Farmers' Union and to the National Poultry Council for their respective presidents to become vice-presidents of the congress. The congress will open on July 22 and close on July 30, 1930, following which a series of tours will be arranged, covering the whole of the British Isles. The Crystal Palace will accommodate the international display of live stock, and practically the whole of the lecture sessions and business meetings will be held there during the congress. The Ministry of Agriculture recognizes that the success of the congress depends to a large extent upon the whole-hearted cooperation of all sections of the poultry industry, and a gratifying response has already been made by the enrolment of a large number of voluntary workers upon the following committees and sub-committees: General purposes, congress building, live stock, education, papers and sessions, press and propaganda, trade exhibits, transports and entertainment and visitors' accommodation and reception, while a woman's committee will subsequently be formed. The director of the congress will be Mr. P. A. Francis, and the secretary Dr. V. E. Wilkins, of the Ministry of Agriculture.

THE Department of Scientific and Industrial Research has published the thirteenth report on the investigation of atmospheric pollution; this is in continuation of the series of reports of the Advisory Committee on Atmospheric Pollution, hitherto issued by the Meteorological Office, the change following upon the transfer to the Department of Scientific and Industrial Research of responsibility for the government's share in the work. The *British Medical Journal* states that the Advisory Committee will become a standing conference of cooperating bodies. In the report the deposit of impurity at 80 different stations in the United Kingdom is considered; a classification is made according to standards of increasing quantity of deposits, this being denoted by the letters A to D

in order of quantity of pollution. It is satisfactory to note that there has been a substantial improvement in atmospheric purity in the areas covered; in 1914-1915 the number of stations ranking as A and B was 54 per cent. of the total; in the year under review the number was 87 per cent. of the total. A steady decrease in the quantity of sulphates deposited in London and Glasgow has been observed, and it is stated that this is, at least in part, due to the increasing use of coal gas, this having presumably replaced raw coal. The tables included in the report give details month by month of the deposits collected at the various stations, showing wide variations in their composition. A section dealing with suspended smoky matter in the air illustrates the effect of the coal stoppage of 1926, while the obstruction of ultra-violet radiation by smoke is brought out by a curve which indicates that nearly the whole of the ultra-violet rays is cut off by a comparatively small amount of smoke in the air. Much of the matter contained in this slim volume—it contains less than sixty pages—is of considerable scientific interest, and should be of some practical value to those engaged in public-health work, but its publication at the net price of 6s. 6d. will not encourage a wide circulation.

#### UNIVERSITY AND EDUCATIONAL NOTES

A GIFT of \$100,000 has been made to St. Lawrence University from S. L. Carlisle and Company of New York City. A letter from the company, made public by Dr. Sykes, stipulated that the gift was to be payable at the rate of \$20,000 a year for five years and was to be used by the university to promote the teaching of forestry, although its use was not restricted to the formal teaching of that subject in the school.

THE Institute of Mathematics and Applied Mathematics of the University of Paris, dedicated to the memory of Henri Poincaré, was opened on November 1, with ceremonies presided over by Premier Poincaré. The money for building the new institute was provided by Baron Edmond de Rothschild and the International Education Board, which also subscribed \$18,000 for the founding of a chair of applied mathematics. The new building contains two lecture halls capable of seating 200, and also 100 students' offices and studies on the ground floor, a library on the second floor and display rooms for astronomical and geometrical models on the third floor.

JULIUS ROSENWALD has pledged a contribution not to exceed \$5,000 for a period of five years for the purchase of books, periodicals and other scientific publications for the medical library at the University of Chicago, the yearly contributions to match what-